

SEQUENCE LISTING

<110> Nehls, Michael
Zambrowicz, Brian
Sands, Arthur T.

<120> Novel Human Polynucleotides and
Polypeptides Encoded Thereby

<130> 008535-0026-999

<160> 1008

<170> FastSEQ for Windows Version 3.0

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<213> Synthetic

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<213> Synthetic

<400> 2

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<213> Bacterio Phage Lambda

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<211> 171
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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gggttagaac acagccaaga acgattgcag gatgggtcct tccaggacac tgacgtctca 180
gcttgccgac tgtgagtccc tggacgagtt actccacctc tctgaacctc ctctcactt 240
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<210> 11

<211> 241

<212> DNA

<213> Homo sapiens

<400> 11

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ctgntatgcc acagaagaca gaagataaca tgcttactac acttgtnaag caacatgcag 180
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<210> 12

<211> 197

<212> DNA

<213> Homo sapiens

<400> 12

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atcccgatc ctctctcccc aaactacctg agccatggac ctcatctgt ggacaaaatt 180
aaactgcca ctttcac 197

<210> 13

<211> 387

<212> DNA

<213> Homo sapiens

<400> 13

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<212> DNA

<213> Homo sapiens

<400> 14

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gacacacaga gccaccctat tgnctactg tcattcaagc ttaaaggaga catatctaca    180
gacagggttt gagcctagtn atggnganaa ctttcttgga tgtctcaaca ncctgganat    240
gannntcccn acaaggcaga anancnaggt ggnacattgn tntattgct tttattcaa    300
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<210> 15

<211> 166

<212> DNA

<213> Homo sapiens

<400> 15

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atctgggaca atggagcgtt cagcaccacg gacagcatta caccctcttc aagtgttgt    120
taaggccatt tgtctatttc actctcaagt aaataaaaat attttt                                166
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<210> 16

<211> 638

<212> DNA

<213> Homo sapiens

<400> 16

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atgacnaagt cccactgann acagacattc aagccatcca tgttagangg ganttgatnc    120
cnttgccctt tgenntgann gnganncttc ngtngccang nnganntgtn gcagntcatc    180
ttgnacgacc tctggtcat tgcattgcta catnatgacc aggttnnagt gattcccggt    240
cttcngnctc ctgagaagct gggattacgg gcctctgcga gactgtttca tagatgtca    300
agacaccagc aaaccagngc caccgaacaa gtatgagaaa agaacaggct agattatgtt    360
atccagaact tcacaacct cagatctaga cagaaggagg tggacagtga acacagaaaa    420
gctgtaaggt gtctgtgac agatgtatgt ggtggacaca gcaggacca gaggaaggaa    480
gaaagaagct gctcttgaaa agaccctcaa accacgatgc tcaaggaagt gtcgagagat    540
gaaggagagg tgtttgccag gcagagcagt agagacaagt ttccgcatg ttggtcaagc    600
tggtctcaaa ctctaacct nacgtaatcc accccgct                                638
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<210> 17

<211> 403

<212> DNA

<213> Homo sapiens

<400> 17

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canagtgnca catttaccta cttanaggg gagatnaaag ccnactcta aggtctcta    120
ttccacagg ctgnaagca aacanggent acaggcttg cangagtga tctaattct    180
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cttactgaag aaaagtcaac agcagagaca ncacagaaaa aggaatcaaa gaggccaaat 240
 ctngggactc aaaacaataa gaaaaaataa atcaacttg ctaaaattta agaatgccag 300
 gggggtaggt aaatgcactg ggaagtatgt gtggactatg atgataataa atctccttcc 360
 aatacaactg atatttatca gaccttgaat aaaacactga atg 403

<210> 18
 <211> 103
 <212> DNA
 <213> Homo sapiens

<400> 18
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 gatcagcctg agcaacatag ngaaaccccta tctctaaaaa tac 103

<210> 19
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 19
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 cagtgtgtcc tggcctttca taacctgcac actcttgaag aggattgccca gcaatgtcgg 120
 agagtgaccc gcggtggggg ttgtctgag gcttactcac aattgccgtg gggtatggac 180
 ttgtggagag aataccacgt acgcgagtgc ctttcacga catcacgtca ggggtgcaggg 240
 tattgtctg acttaccact gtgaagtcac ctttgatcac ttgggcaagg tgaactctgt 300
 gcatttctcc aacataaaagt tattatcttt ccc 333

<210> 20
 <211> 92
 <212> DNA
 <213> Homo sapiens

<400> 20
 gtggggcttt tcaagaggat cgcttcagg aggtcaaggc tgccatagcg ccaactgcact 60
 ccagcctggg cgacagggca aaacctgta tc 92

<210> 21
 <211> 259
 <212> DNA
 <213> Homo sapiens

<400> 21
 gaaatatat atgtagtac atttcatcct tggaattcct ctctcctgtg agtgcaacct 60
 gatttgagat gtaaataaac tgcgggtgata atgccggagt ctctcagac gccagttct 120
 cccgccagcc gaggatggga gtgatgatga atgggtgccag gcccgctgca taatctttc 180
 tgtttaata ctcgattatc atgtccctca tcttccctgg acccaagact caacacatta 240
 aaatctcttt gtttctcc 259

<210> 22
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 22

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gtggacgtca agaggaacac accagtggaa gaagacacaa gtggctggat attgagagga    60
acgcactggg gaaagaacac accaaccagat gccatccagc tgacaggcca tccaccagtg    120
ccgcagagtt tggacagggc agaaggagag cccagccact gagcagcttg actccagggc    180
aaaaccatct tctactccg tctccctct agtccccc tttactgact gctattcca    240
ctcaataaag tcttgattg atttccaag                                270
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<210> 23
 <211> 260
 <212> DNA
 <213> Homo sapiens

<400> 23

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gaggaaagtc aagtgtctt tgaattctt tggtgacct gaggtgggag gtgagaagag    60
cagtctggg tggactgtgg cctggcagct accatcattg ccctcttcaa ccacagggtc    120
atcaaggcta ccattgagtg gctgctttat cagtgaagac aacacaggga gaagatctca    180
tcagagggga ctgggtatt tcagtgatca aaacatgctc ctaaactggg ataactcat    240
taaaagatgc caccttctg                                260
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<210> 24
 <211> 238
 <212> DNA
 <213> Homo sapiens

<400> 24

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agccttcagg gaaaagcaag actgtcctgt agaagcacca ggaagatgtc caacagtgt    60
gtagtgaata cctgggagat ggggactaag ctgggaagct ggactgccct gattgagtgt    120
tgatcttcac cttgatgga gagagccata ttcttagttg gccctcagct tcatggctaa    180
cncnnggggt taancnttn nggnttgga angnnaaang ctttgacct ggttttga    238
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<210> 25
 <211> 209
 <212> DNA
 <213> Homo sapiens

<400> 25

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gtatggaaaa accacaggga gagggagaag ccttgagatc acatggaaga gaactgagga    60
attgagctga caatgagaat tgaggtecca gcctatggc ccagttgtgt gttccagcca    120
gcatccagtt gttgaactg cctctatact agtaacaag taattaatta atacaagtaa    180
atgaaaacaa gtaataaagt aattaatac                                209
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<210> 26

<211> 528
 <212> DNA
 <213> Homo sapiens

<400> 26

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tctgactect ctccaagttt tttgcagct tactcaaaag atgaggaagc tgatgccag 120
ccaagttcan atatctagta agtgacagaa cctagatacc aaccaagca tctgactcc 180
agagccttct tcgctgtacc aaaggcttag gtcactccac ttgtttgtt ctggtcaaac 240
atgtgttgac aatgtgtgg atgcacacct agaattgttt ggaaagatct gtgaaaatat 300
ggcagtgaca agatttcctt ttccaatag tttccacag taaaacacca gacattcatg 360
attcaaccca tgtctgggat tctgcacgat caagtgcctt cagtatttta agcttttga 420
taattcatag ctatcatgtc taaattgttc tgctgttct aaattgccc tgcattgtga 480
ctttcaaga taagtcttt cagctgataa actcctgttt ttaatgc 528
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<210> 27
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 27

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gacacacaac tggactacat ttcccaccct catcagcagt gagatgtgac agagttctag 60
ccaacgcagt gcattcttc aaggcctagg acatagacaa ttccctctc ctctccagg 120
cttttctcc aagctgacgg gatgatgatt gccagacaa cctgggagc tgtgtgtga 180
agatgttaga accaccagca gtttgacttt ccagttaatt gcatggagcg gggaccctgt 240
acctttctct gccactcaa cagaaacacc cacctgaac tattatgtga tatacaata 300
aactccttt gtgtcgc 317
```

<210> 28
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 28

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atctactgg aggagacctt gaggaacct aaaatagagg aaaaagtgt ttactcagac 60
ccagggagtg actggtgtg cagtgggtgag caaacgaag catctgcct taactcagt 120
agaggatgac aataaataat catcaaacac atcattgcaa aataggaagt gaaataaaaa 180
gaagagcatg atgaaataga gaataacatg ggttgtgtg ttgatggaat aattaaaga 240
ggcaagggga tctaatgaa tgagaagaag acaaaaatcc tggaaggga agagctttct 300
tgcagaagga agactatag caaagacctc aggaaaatga gaaactgaaa gatgggcct 360
gtgactagca tgaagtgggt gaaggagaaa tgatgtgaaa ttaattgga aaaatcacca 420
ggaattanac ctctacagc catgtgccca agatgcagaa gccactcat tcttgtgct 480
ta 482
```

<210> 29
 <211> 258
 <212> DNA

<213> Homo sapiens

<400> 29

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gccccatttc caaatatcat cacaatgaag attagggctt caacatacga attttagagg    60
acacaattca gtccacagca acgatgcata gaagacaagg caatatgaag tgagaacaga    120
ggtatttgaa gctgtcagcc ttcaagactg gagtgcagca gtgacaagcc gaggccacca    180
gaaactggaa gaagcaagga aggatcctct cctggccttc agaacttga cagaataaag    240
tttttttt taagctgc                                258
```

<210> 30

<211> 179

<212> DNA

<213> Homo sapiens

<400> 30

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gtaactgaag atttaccatc gtaaatctgg atgggaactg aattcctaca tcatagacag    60
tttcaaggag ggaaggatta tgtgttcagg aaatactctg cattctcaa actctacatt    120
gttggtgctt agatttgctc tgtgagaacc tactgaaata aaccatttct ctggaagac    179
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<210> 31

<211> 138

<212> DNA

<213> Homo sapiens

<400> 31

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agacatgttc tcagtatac ctgggctgcg gtacagtggc aagatgatag ttcaaggcag    60
cctggaactt gggctcaaat gatcctcctg cttcagactt ctgcctcaat gctgattata    120
ataaacatat tctatttc                                138
```

<210> 32

<211> 478

<212> DNA

<213> Homo sapiens

<400> 32

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gaccaggcta aaggaacaga caccactaca gacgtggctc tcaaggagag ttggagctca    60
agtggggaca aggcccttgc tgccacatc acgtaaaaat ctacgtgtc ttaatgcac    120
ttcagctcca ggaacctcag ctcaaagaa aaccaaagc tcatgttca ttaattccc    180
cttattcggc ctccaaaga ggtggagaat agctgggtgt cactgtcca gacctgaga    240
tggcatttca agattttctc tgcaatctgg tctctgaaca gacttgagcc tttgtctgct    300
ggttcccaac cctggttaca catcagaacc atgtgtcca ggacctcacc tcttgagtc    360
tgangttgag ccaggaagc tctatgtctc catatttcca tccagacacc ctctctnttc    420
atgaaacct tgnaaatgnc ttactcantic ttanacatg gcttaaacct cacttttt    478
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<210> 33

<211> 227

<212> DNA

<213> Homo sapiens

<400> 33

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tgaagcagga agaaggaatc ctgagtcctt gggaaacaag gatctacctg aatagctccg    120
aatgcctact tctagatgtc ctttaggaa gagaagcaca cccttggtga ttcagccac    180
tgctatttaa ggtttaacct aatcatgata ttattggtt ttcttgg                227
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<210> 34

<211> 273

<212> DNA

<213> Homo sapiens

<400> 34

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ggcccagctc ctaacatgca ggtgtcacca gagagaaatg caccactgtg cccagcacca    60
tagctctggc tcagagagtt tgcctgagaa agcagcagac agaaaacaga aggtgcgagt    120
tgctcccgaa ggaactgact tcatgtgcaa cagagctcgg agaagtccaa ggctaagcac    180
actctccaga acagtggagg ttgtgtgtaa aggcaactgg gaggcgacgg agagcctggg    240
aggtgcgggc tacactggag gccagcaagt ctg                273
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<210> 35

<211> 366

<212> DNA

<213> Homo sapiens

<400> 35

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ataacagaga gcgcaaaca cttgttcaag gtcattggac tgaaagtac agagccagga    60
ctctgtccca catgcaaaga ctccacgcat catgcctatg atactcagag aaagaaggct    120
atcattataa agacctatac ttgatgctag aaattcaaga cgaagcctgg gcaacatagc    180
aagggtctca tctccacgaa aaagaaaaaa aattaaaaat aggcatagtg aagcacactg    240
gtggtagtct tagctactca ggagactaag gtgggaggat ccccgagcca aggagtttga    300
ggctgcagtg agctatgcaa acaccactgc actccaacct gtgcaacaga gaaagacccc    360
gtctct                366
```

<210> 36

<211> 262

<212> DNA

<213> Homo sapiens

<400> 36

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ctcttcaca tcctctttg ggtcccggtt gctcagcaag acctttcttc cgactgcacc    60
tctctctct gctgcagtca ccgnetgagt tgggccaggc agaattctcc caaatactta    120
aatgaaggcc cacttcaggt ttgggcttca ccgcagagct gagatgaaac atgcaaggca    180
ttcgggcccc tcccccttct ggccccagct gaccttccac ccacagcact tacactcaaa    240
taaaagaaaa gtcactccct gc                262
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<210> 37

<211> 88
<212> DNA
<213> Homo sapiens

<400> 37
gataacaata cgaagatcca cctgtcttgc tgctgcccac gaccacactt ccatccacaa 60
gttccccagt aaatcacctg ctaccagc 88

<210> 38
<211> 119
<212> DNA
<213> Homo sapiens

<400> 38
tgaagtttc agaagctaca tgacacgcgg ttcaattccg attgaatgcg gaaggagata 60
tgacaacctc aacgtctctc attaaagccat acattaaaag gacttgcaag atgtaaaat 119

<210> 39
<211> 253
<212> DNA
<213> Homo sapiens

<400> 39
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agtcaaaatg ggagcaaaat tgcattcatg caaagagctc aaagaagaca actaatcttt 120
gttctaaata caacatggga tcctcacagg tgggcacatt agaaaagacc actgatcaag 180
gaccaatcac tgcagcaagt atgtgagttc cataggtata tctgaatttc aaaaataaaa 240
agatgctctc aat 253

<210> 40
<211> 348
<212> DNA
<213> Homo sapiens

<400> 40
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ctacatgcta cagcctggaa ttctgggct caagtgatcc tctgccttg gactccaac 120
aaactgggac gacaggtgca cgtgccacca taccagctt ccaggagagt ttcacgcaca 180
caggacagga tccaaaattg tctaacttc agaggaaagga ttaagaacaa gatttcttt 240
cagcatcttg tgagctctac ttcttttcc ccctgcatg gcatttgga tagtggtagc 300
ctatcctaaa tctcctaatt gatttaact ccattaaaca ttaaaaac 348

<210> 41
<211> 265
<212> DNA
<213> Homo sapiens

<400> 41

tnccggagt gtggatgtga acacgccgtc ttgggtcctg aggtggaagc catgtgtgga 60
agatggaggg catnggttag aaggagtcta gtcctgatg gtcactgagc tgcagaacca 120
gcctgggctg ctctctgctg gatgtcactt actagagagc gaaattaaat gtgcttcagc 180
tactgttact ttgggttttc tgtcattgt agctgaaata atcctaata atagagata 240
tattaagtaa acaaaatgc aaatg 265

<210> 42

<211> 288

<212> DNA

<213> Homo sapiens

<400> 42

aaaacggcta aagcaagggt ggaaacagcc accaggacgg actggagggtg agctgtgctg 60
cccacagcgc tctgcttact cccatcctgc ctatctctgc acttcagcgg gaactcataa 120
gacaccaccc tgctcctgcc cagcacttta tgtattcatg cacaggatgg aagacctcca 180
acaaagcagc attgttgatt tcttagtgtt ctctcacc cagagcacat gcccaagtcc 240
cttccaaacc gtaaggactc ttggaaaata acaaatgaa ccaacccc 288

<210> 43

<211> 192

<212> DNA

<213> Homo sapiens

<400> 43

aattactggg ttaaaattac tgacctatca tcaactctgca gagaagccac gtgatacctg 60
aagacattct gtttaccaga agttccagt ggagaaactt ttcagaagt ctctattgc 120
aattgacaag tcttgtgtt ctataatgtc attgaattg taaactatta aagtaatgct 180
cttttcatt cc 192

<210> 44

<211> 153

<212> DNA

<213> Homo sapiens

<400> 44

aaaatgaagg atggaagcaa aaatggagat ggaacgaatg agaaaaata gcataagaac 60
accaggatcat cgaggcgaaa gcagtgatat tatctgggaa actggaagaa atccaattgt 120
ggataaagat aaattacaga tgaaccagt gct 153

<210> 45

<211> 175

<212> DNA

<213> Homo sapiens

<400> 45

ggcaaagatg aaaccacaag agaaagcaga aagcagaaag aaggacaact gctatagact 60

ggatgttggt gtgcctcaa aattatgttg aagcctcatc accagtgtga tgacatttgg 120
atgtggggcc ttgggaggt gaatggtgat gagagtaaag cccgtatgaa tgaac 175

<210> 46
<211> 278
<212> DNA
<213> Homo sapiens

<400> 46
gntgatgtan acagtaacac caccaccacc actgnancca ctccattcca tctactatct 60
agaaagagca gttctcnaat gggaaatgat gaggtctcat gatgtgtcc aggttggagt 120
gcagtgggct attcacaggc acgatcatag tgcactgagg actcaaaactc ctcggctcan 180
ggaatcctnt ngccttagcc tctgagtag ctgagactac caaggctgag aaaattattt 240
caagctaggc tggnaaacac acntgtaaat agtatgaa 278

<210> 47
<211> 240
<212> DNA
<213> Homo sapiens

<400> 47
accagagtga aagacaaatg ngttattactt ggggtggctta tgaacagcaa ggaaaaactg 60
actggcaacc gccatggaaa ggggttgaaa ccgtaaccac gaggactctc acattacat 120
gttactgact agcgaatgtc taggcctaaa acatctgccc tcttatagct gntttattat 180
tatgtaaaca tggctacaag atttctgaca taaaatagta gatgactcag tgtcttcaaa 240

<210> 48
<211> 306
<212> DNA
<213> Homo sapiens

<400> 48
gtgtctctt gatggtggcg gccacactc ctgaccagag ccaatgaaga agagggcaga 60
gcagagggga gaggggctca ggagtaaggc tgcaggaagc aaaggaagtg tcaactcaag 120
agccacaaac aacatcagct gtgcacctgg caaagagcct gtgaatcctt cagaattgct 180
attactaaag gcatccttac agtcaagtct ttgaacaatt ttcagattt atgtcatatg 240
aaacctggg acagacataa accaaattgt aaaaaataag taaatgaaca acaaaggctt 300
taagag 306

<210> 49
<211> 265
<212> DNA
<213> Homo sapiens

<400> 49
gtggggtctt tcaggatgaa gtcatgggag ctgaacgaat tggcctgaat cccaagaggg 60
gagtgttcag ggcgcgctg tccctcggag aggctgaggt aacgctggct ccttcccggg 120

agtcctgaa cgcccggctt tggaatctgc agacagctct tctagcaggg cgttggcacc 180
 tactgactaa ccgtgcaatc actcagcagc tgtgatggtt ggtgacatgt ctttcacagc 240
 ccaagatagc ctccctagac tgagc 265

<210> 50
 <211> 243
 <212> DNA
 <213> Homo sapiens

<400> 50
 tggggagctc ctgctttgnc aaaactcna gacgtnantc aanatgcaag aggaccatt 60
 cccacatggt tatgcctcca acaaactcagc agcaagcaca cgttgcctaa ccgcccacac 120
 cctcctccac aaaccacctt ggaaaaatcc cggccctcaa attctctggg agactaatct 180
 gactgacaat aaaactctgg tctcctgttc agctgccttt gtgcaaatta aagagtttat 240
 tgc 243

<210> 51
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 51
 gtgcaacccc cagcccagga ggagacttga ctgcctgag gtcagctgga gccaggaaca 60
 cttttgtgca acagctgccg tggcccatct gtgagagaca cgtggacccc gtgcctcgaa 120
 acaggctctg ggagtgggtg aggcaccatg atccctcag aagattcagg gaaaaaaaaa 180
 a 181

<210> 52
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 52
 gccctacaa atgcattggac ttgactctn gccagacagg accaagtttg tcaccatctg 60
 gcaatcatcg tgaggccgga aggggagact ctctcagag cacttggtat gatgtccctg 120
 tgaagaactt tgtcagctgg gctggcgaag tgggtgtgatt tccagtgtag actccacacc 180
 tgaggctctc aagcccagaa ggcccttga ggtctcacta aagaggggct agcagcaaca 240
 tgggggagtc cttgggagct ccacgaatca gaatcctggt tctattattt atgaaggata 300
 attattaaag taaattcctc tgtctttagg tc 332

<210> 53
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 53
 tgattccata aatggtcatt ataaaagaaa ctgcagaaat gaaaaaagct gtccatcata 60

attaaaggcc aggttggcac tgatcacaat ctacgtgtac ttcaggatga atacatgacc 120
 aacaatcttg tctggtcttc ctctgtgga ttatttgatt gaatgacttt caaagcctgt 180
 cttgttttg tgttgctata aaggaataac taagactggg taataactta caaaggaaaa 240
 aagggtttat ttggctcaca atactcatgt ctggaaaagt tgaagactgg gcatctggtg 300
 acggcctcag gctgctccca ctcatggtga aaagcaaagt ggagtgtcat gtgcaagaga 360
 tcacatggta ggaggggaag caagagaaag attggggacg tgcccaggtc ttttaacaa 420
 ccagttctca aaggaccag cttgacgaga actccttacc c 461

<210> 54
 <211> 218
 <212> DNA
 <213> Homo sapiens

<400> 54

ataaggagga tcgtttgaga ccagcctggg caacaagagt gacacccatc tcagaaaaaa 60
 ttcaaaaact actcggccat ggtggatgat gcagcagaag gccttgcatc agagggcctt 120
 cttgtgaatg cttgtaagcc atcttatacc agatgcaggc ctcttgacct tggactcccc 180
 agcctccaaa actaataaat gtcttttctg tataaatt 218

<210> 55
 <211> 633
 <212> DNA
 <213> Homo sapiens

<400> 55

ccaaactgaa acncctcaan accagtttct gttatattaa caccttgggtg ccggcaatgg 60
 atatcagttc gagaactaac ccaggggca aaaggactga catntgaaag cagcgggtata 120
 taactggtgg cntaagaat gagntttatt acgccctctg aagtctagag cccactgaac 180
 cctgaaggga gtaagacnga cgaatggaac tgaagggtc atggcntatt cacatacttc 240
 cgctgcttnt ctttgtgcaa gtngccgaag acatgccaca gntgctcgnc gnagtaacaa 300
 atgggaacta cataagttaa cctgtaaatac ataacaatgt taggcgatnt ctcttataaa 360
 agctgtaatt cttaactctt atttgccaa tgaatatata tatacatata tacatatata 420
 tggtttgctt tgnntttttt ttttaaaana nagatttnc ntttttccc aaactggacc 480
 canagggngn attnaaatn acttgggnanc tccgcctttt ggttttaaaa naatttttg 540
 ccccgggcnc ccaanangcn gggattacag ggggntgcn cccacnccg gggaaaaatt 600
 tggntnttta anaagggggn ggggttttcc ccc 633

<210> 56
 <211> 650
 <212> DNA
 <213> Homo sapiens

<400> 56

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 tcaagtgggg acaaggccct tgcttgccac atcacgtaaa aatcttacgt gtctttaatg 120
 cacttcacgt ccaggaacct cagcttcaa gaaaaccaa cgctcatgct tcatttaatt 180
 ccccttattc ggtcttcaa agaggtggag aatagctggt gctcactgtc ccagacactg 240

agatggcatt tcaagatttt ctctgcaatc tggctctctga acagacttga gcctttgtct 300
 gctggttccc aaccctgggt acacatcaga accatgtgct ccaggacctc acctcttgga 360
 gtctgaggtt gagcccagga aactctatgt ctccatattt ccatccagac acctctctc 420
 ttcattgaaac ctttgtaaatt gtcttactca ttcttagac atggcttaaa cctcagctcc 480
 tccaagaagt cttncaagat tcaccagatg aaatgtatgg ccatttcttc tacattcccc 540
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 cattnccgct tctatattcc taacacctgg ccagaaaagg gctaaaaatt 650

<210> 57
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 57
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 atatgtgagt cccccacca ctagaactct taagtggctg ctgttatgga aggtcaggct 120
 cataatcacc gcatattaag tccttaacag caatgtctgg ctcttcatta atctgtaaac 180
 ttactgattt accgag 196

<210> 58
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 58
 ctgggattcc cgcaactgcc agtgggtccat ggtaccctca tccgccca cctcaagga 60
 tccagtgtcc cacttgcggc agccctgtgg ctttgctgc acagctgaga cctcgaaacc 120
 cagctatgtg gtccacacc agacctacct ttctccctc tgtggcctgg actttccaga 180
 gaacacaagc aacaagaaga tcacaacctt aaggagggtt gcaactgaga aggtggccct 240
 tctgcagct gccaggctgt tatctgcaca gagcattgca gcgtgagcca cctcagagat 300
 ggcagggcca gaggctaaaa aagcagcatt ggcacagccg cagggatgga ttgaggagc 360
 cctggaatac tccccaaaa atgccgcagt tagaatacac agcgtatcca ccagt 415

<210> 59
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 59
 gttttatgt catttctctt cacccaacta gaagacagaa gaaaaacagc tacacaggct 60
 tactgttctc tctcgagcac ttgcaacaac tgtttggaat ggcaacatag atgcattgag 120
 taataaagtc acaacttctt gccaatcatt ttgggctaaa taaagctaac attccag 177

<210> 60
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 60

aaaaaacgtt gtttaggag tcggcatggt aacagggcca attcttttag agccaccaag 60
cttctcctg cagtcatcct gccatggt gttgatggcc ctgatggggc ttggagcccc 120
canaatgtgc agaanttga caaagggtgt ctcaaagtc aatggttgn ttatnaccga 180
aagccacgg natccagagg aggcccttn ctncgaagt tacagagagc acaggtctct 240
gtacgtcca agtttccct gctgccaat gcaggggagg agagaattct ggaagccac 300
cctgtcccat ggctcccctg gcacatggag ccactgaatg tctgtgaac attaaacaaa 360
tgcttcaag tg 372

<210> 61

<211> 120

<212> DNA

<213> Homo sapiens

<400> 61

ggcctcctct ccctgcccc caatgccatg cgagctgacc ttggacctgc gacccttgcc 60
ttcatctgtg ccgagaccta cacaacagt gatgaagcat cgcagccgga ggtgggagag 120

<210> 62

<211> 299

<212> DNA

<213> Homo sapiens

<400> 62

ctctgttaa gctacaatgn ntnaaannt tngtgncttt nttaccgcc caantnaaan 60
gnntttttt gcatgatcaa gcccttcctg atgcccttgg tgagagggga gctcccctcc 120
cctcagctct ggccacagt tatccggatg gccactgtcc cactgcagca cgtgggcttg 180
ttagctgtga tggtccttgg agggctgagg ccacgttcaa tgctgtgtct aattcagctt 240
tgtatcccca acatctcacg caglacataa aacagaataa acacttttgt ttataaatg 299

<210> 63

<211> 358

<212> DNA

<213> Homo sapiens

<400> 63

caaancngna atngaaaagg nnnngtcng ccentgggga natctntaa aattcagtga 60
annaaangac gaantacca ttaattttac catccagact gcacaaaat gtaacaata 120
ctgtnttctc tctattaat aaacctgtac ttatatttta taaaattggg agcatatttc 180
atacttttat aacttgtgt tttcatgtat atcatgaaca tttccaaga ttgttaaata 240
ctctgaaaac atgattttta atagtaatat taaatatttg nnatattcct ttgatagtc 300
cactatttat cctacatgat ctataacata agtataaata aaaacatttt accttcat 358

<210> 64

<211> 195

<212> DNA

<213> Homo sapiens

<400> 64

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agaatgttaa aagcccaaga agaagagtag ctccaaagat ccaggaagca gaggaccatc 120
accaggataa atgaattca actatattga atcactgcat tgttccattc aagatataaa 180
ttccagagag aaagc 195

<210> 65

<211> 323

<212> DNA

<213> Homo sapiens

<400> 65

aaattccagg gactaatatt gagatgaacc aggcatgaga ccaagctgca aaattccaga 60
aatgacctcc aggtgttag tctacaacc agccatcgtc aagataacat tagactgcgt 120
tccaggtgga ccatgactca agatagccac cagaccaagg cacggacacc tagcaccag 180
caccactcct gcattgcccc cactctaagt tcccccttat aaacacctct ccacagtga 240
aagttgaaa tcgtcttta agggcatgag ctgggccatt cccagatctt ggcattgaa 300
taaagtagct ctctgttcat cac 323

<210> 66

<211> 175

<212> DNA

<213> Homo sapiens

<400> 66

gaatgagagg gagaagaaag aaagggagcc tagacagccg agataagcca agaggaggga 60
agtggagaaa ggaacactct ctacgtatgt caggcatttg gtacagaatc agagtccaa 120
atgggcacat ttgcttgccc aagcttaagt cacaggcttt tctaactgcc aaagg 175

<210> 67

<211> 243

<212> DNA

<213> Homo sapiens

<400> 67

cctgacttcc cagacacctg aagtgtgggg ccacactgtc aagtcgcccc ttgtccat 60
gactgggatg tatatcacag atctgcttca tcgcagcaca gtctggaagg aagcctggga 120
ttccagggct gggagagacc tcgagagaca gtcaagctca tcactcaac tgcaggcaga 180
gaaatgcaaa tataagagct gattcctaag gtttcttcaa tgaataaaat tatacaaatg 240
tct 243

<210> 68

<211> 179

<212> DNA

<213> Homo sapiens

<400> 68

ctggaatgtt aagttgagaa ttttcagca tctccctgtc tgccagatcc tatctgagat 60
gcctacgcta agaagccaac acagagacac gcaatgcaca ctatcagcag gagtggcttg 120
gaaattctga cttgtattga ttgagacacc ttcccacgaa gaaagatggg attagtaat 179

<210> 69
<211> 160
<212> DNA
<213> Homo sapiens

<400> 69
ggcagcaaac aagagctctg aaaggggaag gaagccagga gaaagccagc tccattagtc 60
acgcagcagc atatctgtc acaaaggacc ccagttgagt aatcgcccaa aatatgcctg 120
ttatttttt ctgtcagaaa aaaaangggg cctgccaaaa 160

<210> 70
<211> 585
<212> DNA
<213> Homo sapiens

<400> 70
ctttcaacaa atgacacctc tctctgtctt caacttctc aagactttcc acacagtggg 60
agccccagag tgtgagtata agctgtgttt atcttcagag ttcaagcaaa tctactgtg 120
gtggggcaga ggaccttgag aaattgaagt tcttgaaaa taactcatct tcaacctaag 180
ggattagggc acctgagctt cgtctgaaaa gattgagcct gctggattga tcagcaattt 240
ccacatcagc aggaaatgtg ctgaccttac ttttctaag catttcgaga aaactggtga 300
agaaaaaaaa gggggnnntnn ttnctntna tnnccnntt caaatitttn aanannacna 360
agggngaata ganagtggg ggttncaaaa ccaaaggnnt tgccaaactg ggnttggggg 420
aaattttgc agncaaaccc aaaagcctgg naaggcctaa aaaatttagc gngnggccn 480
ccnnnganc ggcaacntna aanaanggcc ttngttcctt ncccccccc ngnnccgttt 540
aaaaaaaaacc cgnggggttt tnaanngttt nnttgccccc caaaa 585

<210> 71
<211> 630
<212> DNA
<213> Homo sapiens

<400> 71
accaagagag ttctctgcca tgaaaagaaa atctgaggtg aagctgaagt tgacaaagt 60
caatctgaac ttaagaccaa ggacacacaa catgagcact tactttgaca gttctgacat 120
ttctcatca taaattctct tctatcaga caattcatcc ggcaaatatc gaaatattaa 180
ttctcggcc agaacagtta tgttaaagt tctgctgccc aataactgta acaaaaaaaaa 240
gtcaaatgat actgtatggt aattgattct aaaggacgaa gcttccgagt ggaaagggtga 300
acaaggaggt ggtgggtggg atctctgagc aggtagaag gaaaaggat ggagagagag 360
gcgggccagc ctgtaacaag agcaggggca gcccctccac tgtgagaaaa ggccaggagg 420
aggcgttcac ctggatgaag gatgaggcaa ctcaatctg acagcatcta cattttcaac 480
caagtccat gatgttggtg agaggggagg aagtgaagta gggcatgttg ggagaggaga 540
gacttttga atgatcagct tggaaagtga agactggact actaaaagaa agaagtgaag 600

aatgattact tatgttttga gtctaaactt

630

<210> 72

<211> 424

<212> DNA

<213> Homo sapiens

<400> 72

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gatatggaca ggagacggaa atactgggta gaaaagggca gttccctggc aaagcctcac   60
cctcaagcct ggatacctgc tgccttaaac gaaaacgaaa acaggcattt ctgtgttcac   120
gtcccaaaag ttatcttttg gcctgccaca cccctatnc tgcccatat gaatcccgaa   180
ccccatactt caaaagccga ccaacnagcc cccanaccaa canaaggntn gcngaacct   240
ntngcaaana aagggaanaag aggaggaaca ttgaaatncc naaatgagtt canctngggg   300
cngtcagana ggagtcanc cncgtggcng ccngaattca agggaggatc ancttttct   360
ttatccctt tctttgctt cccantcatt ctngtgaag gcccttccc ncttcattaa   420
aact                                     424
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<210> 73

<211> 410

<212> DNA

<213> Homo sapiens

<400> 73

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gagtaagaag caaagacggg tgtgggcatg tgactagagg gtcctgagga gcagaagatg   60
agttgcatgt gctacgatcg cctgtttgac ttgcaaagca catggctctc actaacatca   120
gtagaatctg aatccatgga acagatcttt gtcaattact attgttatta gttttccttt   180
ttatctgata gttcagattc tgtaccctct tcagggttcc agaagatttc ttttctgta   240
aatcttgatg agaggcaaaa ctgtctccc actgtagaag tggaaggctc atttccagt   300
ctcccttgca gttgggggtc agaatatgac tgagctcttc ctggcagatg cacccttcta   360
tagtgcaaa gaagctgtga ggaggaggaa cattgctgga ggttggcggc   410
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<210> 74

<211> 337

<212> DNA

<213> Homo sapiens

<400> 74

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acaatgagcc ctgaatcctg ctacatcaga gagaacaaga tctttgcttc attccctgtg   60
gtaattacga ggtagaaag aactcaccag cgaaaatttc tggacctgat gcctttataa   120
acggtggcaa gtgctgctgc attcatggc ctcatatcaa aatacaacct cattagctgc   180
tgtgaacaca atgttctgt tgaagaatag aatggaatgg agttaagagt gtagaaggtc   240
tgatgcaaat ttactctac tcctattgac aaagagtttg aactactgaa ttgtatatg   300
aaagtcaggg catcctattg tttcagttg tcataag                                     337
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<210> 75

<211> 150

<212> DNA

<213> Homo sapiens

<400> 75

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gacgtctggg gagctcctgc attaatcag aactgagtgt ttttaagca aaaaagaaaa 60
aaggaaaaaa ggggaggaat gaaagagaca gagccggcca ctacctatc tagcaaatag 120
aagcctacag acacttanng angncaccc 150
```

<210> 76

<211> 320

<212> DNA

<213> Homo sapiens

<400> 76

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gaaatcgaat gcctgtcttg aattcatgtg aagcacagag gtgccagatc tacagtataa 60
tgaagaacta aggctgcaaa tgcgggaatt gaaagaacca tcttaagga aaggatcacc 120
actccaagat ttaacaaaaa tataaaaaa ccttccgtgt tgcttagtct caaagaaagc 180
ctgcaaatat ggatactgaa taagctttct caaggattct tctaaatcca gtcccatctc 240
tgtgggacgc tcacccgtgt tggccatttc catctgaatc actcctctc ctgagtttaa 300
taaagcacac gccgggccccg 320
```

<210> 77

<211> 338

<212> DNA

<213> Homo sapiens

<400> 77

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ggttctttga gaggaagggtg gaggggagcc atcctaaaat ttgcagcaga gcctggcttc 60
taacacagcc tcagactgtg gatgaagcag atgacctgtc cagcttctt tccaacattg 120
ctgtttgagc gcatacagcc ctttcctgtt ttgaagacg ctagccagct cagccagaga 180
tgctctttgc caagtctgca gtcttgggat tagagtatgc actttaacaa atcttcttc 240
ttgagcagaa tgtagttggc ttgcttcacc accattcttt cctacctcca aaggctgcca 300
ggcctgctaa atagtgatta aacaaagatt aaaattcc 338
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<210> 78

<211> 396

<212> DNA

<213> Homo sapiens

<400> 78

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tcggaattaa atcattgatc ccagaagaaa gggaccacca cagtgtctag gaaaacagga 60
attgtgagaa gttatgggat ccattttagc ttgatttact cacagactcc ttaagcacac 120
ttcataagat gaggaaactg agacactgga agaggaagta acttgcccaa tgcactcag 180
ccaggaagag gtggaaccca gcattgaaat ccagacagtc taactccaaa acaataaac 240
aataccacca cacttttctc ttctaggcta tacatttcta atggccaatg aagaaaacna 300
actgaaaaca aaattccttc ttctgntct tgnattatnc taaagggtgg ncttttagct 360
catggtngaa aattaaagta gtaacatggt ttcagt 396
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<210> 79
 <211> 83
 <212> DNA
 <213> Homo sapiens

<400> 79
 atcttcactg aggtggagga gcagtgcagt ggccaagaga aagatgggat tgacagaggg 60
 aaataaaaag aactctgata tgt 83

<210> 80
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 80
 gtcatttaca acaggaatta aggacaccga aaaaaaatct aaagaaactg agaggtggaa 60
 ctgaaaatac agaagcagat ttgtggttg gaagggagct agncctcatg aaaaacagca 120
 acctggcaaa cactattttg gaataccgtc atttcaaaa tatacatata tttttaagc 180
 ataaaactgc atttgaagtg gaaattaacg tattgtttt tagcacctca gctaagtatt 240
 taggatgcaa aaaaaaaatn taaattttt tggaaaaaga atcattcaaa taaaaccat 300
 taaaggggaa aact 314

<210> 81
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 81
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 caagccaaaa aacctgaaac cacaggccaa agtgagagct tatatactg tttccact 120
 tgaatgctgc ttttccca accacccctg gccccgccct gcgccatcct gtgcctatta 180
 aaacccaga ctcagctagt acatgggact atggctggac gtggganaaa agcagcttga 240
 cttcagaagg acagcttaac agcgttaact cggagaagaa tctggctgga gatgacctga 300
 ctnagggga aggnaatctt cctacccctc tcgattaca aggtccctt cactgngag 360
 gccctttat ttgccataa aa 382

<210> 82
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 82
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 atcaagacca aaaaagtac tgaaaccaa ttacttgggg aacagatgaa gaggatccca 120
 agcaatggtt gagtctctc catggctcca gaactcacag gatagccct ttctcgctgg 180
 tccatgctc ctgctctgat ttagtatct ggttctggg atcaaataac atcatctct 240
 cccatcatcc ctccaggact aagggtagca atgatttatt cttcttga gtctctgagt 300

cacatcagnt cccttgcttg ctttctcaac ttttctatta tctatgg

347

<210> 83

<211> 260

<212> DNA

<213> Homo sapiens

<400> 83

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tttcaagact gtaagtgcct tttcccagga tgccagcaag tactgagcct gtattttgag 120
ctgcatcaaa cctgttgga ataaaaaagg acatttctag gagatcagtc ttcaagattg 180
gccccagttt ccccagagta ggaagaggca ggaagccaga gcacatgttc tctccagaaa 240
taaagttgtt gcagtggcct 260

<210> 84

<211> 169

<212> DNA

<213> Homo sapiens

<400> 84

atnctgcaag gngtgngtgn ncttcccanc catggattac aggnaaaaac ttgactgcat 60
gtgatccttt gtagttaata acatgatgat tgtgttttca cactctcgtg tgagatatgc 120
ctccctcaaa tcttggcaca ttacccatct gacattaaaa aaaaacaac 169

<210> 85

<211> 238

<212> DNA

<213> Homo sapiens

<400> 85

cgctgcataa ttgtaccatg agccacgatc ctaagtcaag agacctttct ctcaccagtg 60
cagatgattg ctccctccag gtgtgtagga gggaggatgg catggcttcc atcaaaccgt 120
gagcttttcc agaacttcca acccaccata aagctcatct gaagaatgtt tgcttttccc 180
tgtcaaatat ttctctgatc caaagtctgt taacaattta aacgtcaaat cccctct 238

<210> 86

<211> 634

<212> DNA

<213> Homo sapiens

<400> 86

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ttacttctgc accacccaaa cagaaaataa ttagacaaga acatttcttt ttctatatca 120
gtgtcataac atgtattatt acagtgcggt gtaaccacat gtcagaagag aatgtgtagc 180
tcaaacacc gaactagggtg gagaggccga ggccttaatt ctccaagaga ctgggacctg 240
tgctgggttc tagcgctgt tcagcgtcag aatcatcagc tggctgtgag cctacgtgaa 300
ttttctcca ctcaatctca tcatccttca gacaggcgga gagagcgga tccatctatg 360

agatttctct gctgagaaat ctctccctc cctccaatga agcaacagca ggtcatatct 420
 gaatgcagaa gcatggcctt gtgctgggaa aacacatcct ggctgtagag ctctcagget 480
 ttagagtca aagccaaggg ttcaaatcct ctctgnetta ctcaagagcc acatggctct 540
 gagacagtga aagtaactct gtgaacctca gttaccaat ctgtaagatg gggatcataa 600
 tgtaaaaaga tggcattaaa acttacattg ggaa 634

<210> 87
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 87
 caggccttgc ctcatcaagg tcagagcagg gcttcagggg gnttacntg gatangactt 60
 cttnnantng tnggnntnt gntaccttt tgagcaagt cagcctggtt aagtccaagc 120
 tgaattggcc aattcttttg cnnnttacc tggaagaaat atcataagc cacctctgtt 180

<210> 88
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 88
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 aacactcccc aggtacaac agncgcgtc cctctgaaa tcaggacaca agaattgaaa 120
 gaaactggaa cagatacatc acttaccctt ggcatccaga acccagagc atccttccca 180
 caaattgggt ataacaaatt accacaaact cagtggctta aaagagcacc aattaggggt 240
 ctgcatcca aaatatataa agagctcttt ttcatatc atccatacta tataaagatc 300
 tctcacaaca acaaaaagat aaccagccca attttttaa aaaggtcaaa aatggaaat 360
 ttctcaata aagatatata gtcaac 386

<210> 89
 <211> 595
 <212> DNA
 <213> Homo sapiens

<400> 89
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 agttctctgg aatctgagaa gtcaagcagg gcttctgcct tgtcatggt gagcctaaac 120
 tgtgatttcg tctctagaca tgacacatca ggcatgcctg gatctgggtt ttctgccaag 180
 cctctgaca gtaacgcagg catttgctag tgtatatgga ggaaggctga cttgaagtcc 240
 ccagtacatt tcaccagtg agaagaggac aacactgact ccagaaagcc tttgctgac 300
 ctgctctttg aaaccagtgt gctgcccagg aatcctcgcc ctgtgccccg cctacactca 360
 tccccaccta cttgtccac tctgccgcca cagcttcagt caggctctca tccctttctt 420
 cacttcatta ccactaaaga aagcctctc ctgggtcccc atgtccagt ctggctccct 480
 tccgatgcat cccccctgca gctgtcagtc attgntctaa aatgcaaac tgaccatgcc 540
 actctgctta aaactctca atgactatgc taacattaaa gatgaagcag attcc 595

<210> 90
<211> 159
<212> DNA
<213> Homo sapiens

<400> 90
gctgtgaaga gctcctgggt tgctgaacaa atggagttgc tgcaaggatg ccatgcctgg 60
agagggcctg gaagccctgt gccacacccc catgccttgc cctatgtaca tttcatctg 120
catcattggc aacatccttt ataataaacc agtaaaagt 159

<210> 91
<211> 555
<212> DNA
<213> Homo sapiens

<400> 91
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aaccttagg aaattcttt ggcttctgga tttttccag tttttgaag tgtttcctca 120
gaaaagattc gcagaagtaa tattagtcca agagctcata agacattgag agaataaat 180
aacacccatg taaaagaacc taatctagt cctgggacat ggcagatgct caaatgttg 240
atctaaatg gatgaactgt caagtcatca aaacagggat tcgcttaaag aacatagtgt 300
tctgccttct agctaagaag cattcgatcc acttaactga attgtgaaac tgcaagataa 360
aggataaaga gcgctgaact gggcctccat aaaagtgaac cacagatttg ctcatgagct 420
gtgtgacttt ggaccaatca cattctctgg gctgtggcc cacaacggat gagtcatgaa 480
catttatctg tatgtctgtc atctccatta gaatatgttc atataggatt atatgtccgt 540
gaagacggga cctgt 555

<210> 92
<211> 322
<212> DNA
<213> Homo sapiens

<400> 92
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gatctcaagg taattagtct acagcccagc cactgctgag atgacaccag cacacgtcc 120
aggtggacca tgactcaaga cggccaccag aacaaggcat accgacctta cactcagcac 180
catgcccgea tgctccctc tccaagtcc tctttaage cctctcccc agcctaaagt 240
ttgaaatgtt tcttgaagg aatgagcctg gccatttccc caaccgtgg cttttggaat 300
aaagtcactt tcttttact gc 322

<210> 93
<211> 634
<212> DNA
<213> Homo sapiens

<400> 93
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gtaataaaag aggggtgggtc gtgtacagta ctcgatcagc ctattccact agatagattg 120
 gtagtcaaaa gtattgaacc actccatgtg tcagtctttg ggctgagaaa tgcttttctt 180
 atacaacacg aaaacagata tcgacagtgt atagcagcat tcttattaca agcccaaagc 240
 gaaaacatca aaaaaacatg gatggcacia ataacaactg caatttcttg cttaccaag 300
 agtcaggaaa ccaagaaaat atctttattc acattgcccg cagaatcctc tgaaatttag 360
 ggacctaaaa caagtggcat gtctttttag aagattatgg ttaaggtat aatttcattc 420
 aaagttttgt aacacttagc tagtgataag ctaggaggaa atttgcatth taaagaagtt 480
 tcagaatttg aaattttgag ctaggaaaat cctcagtatg gaggaataat gactgcaaca 540
 aatttgaact ctgaggaatt tcttgacaaa tatatactgg catccagatt accttcta 600
 gctttccgtc angtttgna agagggtga gtga 634

<210> 94
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 94

gacaagctgt gaaatgccta gattccagag caacagactg tgatccattc ccaacaaccc 60
 ctcctaccg tctgccacca gtcccttaa agcaggaatc agagctagac tgactcaact 120
 aagaattgtt ttggagaact tggaactcaa cattccanaa agcaagaagc ttgacatagc 180
 atcgatgagc ccaagtcaac tatatgaaca aaacaatgtc tcaggagggg cagggtatca 240
 cgtcagaaga atcctgagtc cttagatgac ctgtagaaa agagccacaa acttactctg 300
 ggctaccttc atacctctga actattatgc agagagaaat aaatg 345

<210> 95
 <211> 256
 <212> DNA
 <213> Homo sapiens

<400> 95

ttcatctggc tctccatgaa tgcctgctt ttctggaaaa ccttcttctg gtataaccaa 60
 gggccagagt atcactacct ccaccagatg ttgggggaac tgccttgaaa cctatacatt 120
 tcagatgggc acccagagag taagacctca cctcgccct caagttgctt acaatataat 180
 ggaaaaacca acaataaat aattataatt caataacaa gaaaagggtt cttctaataa 240
 acacatgagg tctgat 256

<210> 96
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 96

agacactgct agcagtcacc tagaggacgc tgcattccag tcttgccat ctcctctggg 60
 tcgtggcct gtgcgccaa ccacagaagg ccgagggtc ctgcttctg gggaaggatt 120
 ctgggaatga tgagtacctc ttgttcatg acaataagac aaagaagaat ttgggaaac 180
 tgtgtctggg gaaacaaaga aaaaaataa ttatcctta gtanaaacag aaaaaaagg 240
 c 241

<210> 97
<211> 262
<212> DNA
<213> Homo sapiens

<400> 97
gngtttngcn aantccagcc tgggaaagct ggcagaggat gcaccgtgtt ttactcacct 60
gagtgnntac aatgctcgtg aggtgcctcc ctgatatgac agaggaatga agaaggaata 120
aacagacctt ctggataatt gcatcagcct tccccactat tccaatgcca tgctaacatt 180
tcaagtagtg tcccttttgt ctggccgaga aaaaatcatt tcatgattta ttactctgga 240
ttaaaggcta tgcacactct gg 262

<210> 98
<211> 155
<212> DNA
<213> Homo sapiens

<400> 98
gtgctatcca acatggacgt ctaatcttta tgtaatttct tggagaagaa acacctatca 60
gttggagagt gtgtaaccac tgcagaggaa ctctacgct ggaatacaag cataggccaa 120
aacctttctt gctcagtaaa actcaatgta gttag 155

<210> 99
<211> 242
<212> DNA
<213> Homo sapiens

<400> 99
gccagctacc tgaggaagtc caactaccct gaaaccacca tgctatgagg gcgcccaaac 60
ctgccaggta gaaaggccac gtggagaagc actgaggtag cagacatgtg agaaaagatg 120
tcttggacct tccagcccag ccccgccacc aactgaacac agggaccagc caacacccca 180
tggaacagaa tgaactagt caactcatgg aatcttaaga aacaataaat tgttggtatt 240
tt 242

<210> 100
<211> 54
<212> DNA
<213> Homo sapiens

<400> 100
gaatggaaac tgaaagtgga aatcaggaaa aggtaatgga agaagaaagc actg 54

<210> 101
<211> 270
<212> DNA
<213> Homo sapiens

<400> 101

gtgaaaactg aggnanagag atggacgtgc aggatagaag gngatnnatc naaggacaca 60
ctgctggctn taggccgagt tgcagntaaa atgaaganct ccngattcct ggcctcatcc 120
ctttctcctt ttgnatgtga ttacataca aatntatata gaaaaccaag anaagttta 180
ttttaaagn actatcctta ctatgtgtga caaactaaca tttctattg ttttttatg 240
aattactagt cacaactcat taaatccatt 270

<210> 102

<211> 287

<212> DNA

<213> Homo sapiens

<400> 102

gcanancaca gnatgggtgac actgncctgc ttcatgaaca cagnaaatgt tgctgagaga 60
tcatggcatt ttctctcctg ctgagactaa gctgggcttc taaaccttaa gagaacactc 120
caggaaactt catctaattg gggttactgt cttggaatca gatgattatt aaaatgcttc 180
caattgtatg tagtatatat gatgtagtat actacatggt tgtgcattat agttaattac 240
atacacacat attttggtcg tcaaaagatt ataaattcct atagact 287

<210> 103

<211> 535

<212> DNA

<213> Homo sapiens

<400> 103

ttttcataa aggaaagcag catgctgtat agatgagaga agacatccaa aggaagaaga 60
tgcaagccga aaaaaattca agcctcccat ggcgcttica gaacataccg cagatctcat 120
gtggcacagc cccagcctg ctttaaaaga gcccatagaa gagaaatcag ttgtgcttg 180
ttgtgtctgg gagaataact aatctcagga ctctgttica ggtgtcctct tgatgggtgc 240
ggcccacact cctgaccaga gccaatgaag aagagggcag agcagagggg agaggggctc 300
aggagtaagg ctgcaggaag caaaggaagt gtcaactcaa gagccacaaa caacatcagc 360
tgtgcacctg gcaaagagcc tgtgaatcct tcagaattgc tattactaaa ggcacctta 420
cagtcaagtc ttgaacaat tttcagatt tatgtcatat gaaaccatgg gacagacata 480
aaccaaattg taaaaataa gtaaataaaa caacaaaggc ttaagagat ttgc 535

<210> 104

<211> 381

<212> DNA

<213> Homo sapiens

<400> 104

ttctaggcc cagatgtcca cctccttica cgagctnaga attgagctcg tatcgccaac 60
atgttttgcg gaaatgctca tatcaacact tggatgaacca ggaagactgt accctcattc 120
ctttntcctg ctgcctgcta ggttgngtta gaaagcttac tctcgagttt tactggcttg 180
cttgtgcttt ttggcatttt caaaattttg tacaatgac ttcaaaaagc aaaaatacat 240
taatttttt aaaggttagga tccatatan atnggatctt catcttctaa cactttggag 300
aacagaaaag tggattttgg agatataatc ttcataagaa ttnggcncnc taataaaaga 360

gccctggaag aggaaagaaa c

381

<210> 105

<211> 177

<212> DNA

<213> Homo sapiens

<400> 105

cagaaactga ggtacacaga agaaaggcca tgtgaggaca cagcgagaag caagtatctg 60
caagtcaana anaaagggt taaaanaacc ccacccttgc cgcaacttg ntctttgctt 120
tctgggcctt ccagaaactg gtggaaaaga agtaaaaatt ctggttggtt taagccc 177

<210> 106

<211> 245

<212> DNA

<213> Homo sapiens

<400> 106

ggggagctcc tgcattaagn caaaactnac aaaggttggg gnnaaacnct ccactcctgc 60
tttcatacca ttgaagtc agaccagtga gattccatc agttgggagt ngaagatgcc 120
acaaggacaa gaactgagga tggttgctc agagctgatt ttagacacc attttccagg 180
gatccctggn gacagaggag cattttntt gtggttgagt tctgaattaa aaagtgtcgt 240
actat 245

<210> 107

<211> 195

<212> DNA

<213> Homo sapiens

<400> 107

gaatttgccg caccacaggg attggacca ggtcacaacc aaggaagctg cacaagatct 60
gaagtgttag ccattctctc tcaaccaa at gcatgtgctg agtcctcata tgctgggggtt 120
cttgcaaata acttcatgt agaataaaat gcttattaa gggtcagtaa taaaatgtgc 180
tgttttgaag cgtac 195

<210> 108

<211> 160

<212> DNA

<213> Homo sapiens

<400> 108

gaaagaaaaa taaacatagt catcagcact atgaaggatt ccaggaagtt tgacatcaga 60
gaatttctca actctaaaa gctggaaacc cctgccctca cgctggaggc cgttttgatg 120
tccccttggt acttttgagt aaatggaaac atcttttcac 160

<210> 109

<211> 155

<212> DNA
<213> Homo sapiens

<400> 109

gaagctcttg ttgaccttc tgaaaaaaat cttgaagtat ctatgagaac agctattata 60
tgaagcagag attataatag atatggagtt taagttgcag aagaagaaga ctgaattatt 120
aaatgggaca tcagaaaata aaagctcttc ctttt 155

<210> 110
<211> 346
<212> DNA
<213> Homo sapiens

<400> 110

atttcagagg aagttgtcta agatgggtgcc aggtcaccag aggtgccaat gcaggacaca 60
ggcaatgccg tcaaggttgt atccggtgag gatgaccaca agcaagccag gtcctagacc 120
taaaggatac acctgaacgt gtctgctgtg aggaatgggc cagaggatta tgtgatgttt 180
catattttt ccttgggact ttcatgttt tccaagtttt ctgccctgag atgcattact 240
gaactctgt tttctcttt actacactgt gaagtaaagtg tgtgtgatga gtcactggcc 300
ttgccaggc tgtgatcttc ccaagaatga agtccctatt taattc 346

<210> 111
<211> 275
<212> DNA
<213> Homo sapiens

<400> 111

gtgatgtgac ccagcctgtg gcttccactg ccatccacac acgtcgtgc ctctctccac 60
atcagcatcg caactatctc ctggaagctt tccaagtgtc gaactacagt aacctcagcc 120
gaactgtgtg tcattcacc cagaggttg cccctcctct gcatctttgt gagaacctga 180
gagtcactct aaactcctcc ttccacctca ctcccacat caaatcgatt accaacttgt 240
gctgatttta tcttcaaata ctctccagaa ttgtc 275

<210> 112
<211> 205
<212> DNA
<213> Homo sapiens

<400> 112

gaggagaaaa gagaaaggaa ccctcccatt catccttccg taccactact cagaaccaag 60
tacctctgct tctaaactac atcagggagt gcaactccca tggaatcaca ggacaagaag 120
aatgggaac agatatttaa gttaaatgat ggcaaagaaa ttggaaaaag gtaaaaagtc 180
agagaaagag aaaacaatgg tggac 205

<210> 113
<211> 487
<212> DNA

<213> Homo sapiens

<400> 113

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gcaggtcagc tgggaaaagg cgaagggatc ctgagacaat ggtggattgc tccgaacagg   60
agcagcctgt tcgggccgag ctccgggtcc ctccgagagc ggtttgcaa ttctcctaa   120
tgtgggagac tgggtcacca ggccaagtgg cccccactgc cccttctcaa ggcactgtga   180
aaccaaatgg aatttgccac gaaagtggct cccggggggc ttgagaaggg atcagctgag   240
gaagctgcaa agctggtaac aggaggggac aggccgtggg tggcgaacaa gcaactgctt   300
gtctctgcag agtgatgccg gctcaaaatc gaaccactgg ggctcaaaa ataaaccaac   360
gctgcctgaa aacacaactt gcagaaaaag aattgttctt gaaatttcta ttgtgaactt   420
ttaggnacc aaacttttga aaaatccaag ttttntgca ntttgccaa ncaagggggc   480
atgaccg                                         487
```

<210> 114

<211> 251

<212> DNA

<213> Homo sapiens

<400> 114

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actgagggat gtcaagcagg tccccagaag aaaagagatg gcatgcaatg taaagaagac   60
ggctggagct gaatcagcca tctttgacta tgggtgtgct ctgagaatgg gatttgaca   120
aggctaagta acatcataga agtagcccag gtgcctgagg acttcaaaca cccaagcctc   180
cactacagcc tcaatttct tccttacatt gtttatgtga gaaagcaata aacttctatt   240
ttggttaatg c                                         251
```

<210> 115

<211> 139

<212> DNA

<213> Homo sapiens

<400> 115

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gngaggncac agcaatctc cngaggatgc agnngcaaga caccatcttg gaagcagagc   60
agccctgacc agacaccaga tnggncagnc cattgatctt agacttncca gcctnagaa   120
ctatgaaaaa taaattgtt                                         139
```

<210> 116

<211> 489

<212> DNA

<213> Homo sapiens

<400> 116

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tagacgactg gtctttgctg gcccaaactc tcaaccttgc caagacaaca atggcagatg   60
tttccatatt ggagaggcag ctggggaagg ggatggaagg caagaagaaa tgatagataa   120
attggtctat agtcaagtaa attgccactg tagagacaag agatacaact tgtaacacag   180
ctggcctgga ctgacagaag attcagtaac aatataaat agcaggaatg atggagctgt   240
aactttgtgt gattctcaa catctacctg gaataatcaa ccatcttcag gattgcaagc   300
cccaccactc ctgtgttgc ttataatcaa aatgacacac ttgggcagtt tctccaactg   360
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cctgataaat tcagttttca aatactaagg tactatatgg catggtgact ttaccattac 420
 tccagggtgg gaagtgactt tccactgttt gcggattacc aaagggaata aagcatattt 480
 gacagtccc 489

<210> 117
 <211> 614
 <212> DNA
 <213> Homo sapiens

<400> 117
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 tggcatcagg aaaccaggc tcttcgaaat atgcagtga aaatgaaacc ctgcaagat 120
 gagacatttg ataaagaaga aaacatcaaa ttttcttgaa gctttcctct cactgtaact 180
 ctgcctcctt ggattgaagc tacagagaag aatgcagcct gcgggtgctc atgcctgagc 240
 atcatctcct cttttccacc tgctgagcta tgtctaaata gacatcctct accttggcc 300
 caaaactttc tgttctgaa tagaagaac attctgtca tatcaagagt tctgggatat 360
 tctgggagca gtttagagct ttaaatcagt ataaagtttc ttttctcatg aaaagatctt 420
 gccacagggg atgagaaaca agctattgag catctaata atgtgtatac catgctaata 480
 aattgtcata ctccaagtct atttaattaa cagaaacacc ctccaaggaa gtcttatccc 540
 ccctcaatta agtagattaa aaataaacg tcttgggaga agataagggtg actgagctta 600
 taagaagagc ccat 614

<210> 118
 <211> 134
 <212> DNA
 <213> Homo sapiens

<400> 118
 gtagagaaat ggagccacag atcaagggtca cccagtgagt gagaagcaaa gtctggagct 60
 gaggcaagtt ttcaaattc ctcaccaag gctttctctt ggaaagccca aagcttatta 120
 aatccttaaa gggc 134

<210> 119
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 119
 caaaatgaca tgaatgactg aaaaagcatg tggagcacaa gactcaagaa ctaagtga 60
 ggactcacac ttctgattt caagtaaagc tacagcaatc gagacgtggc attgatgaa 120
 gaatagacac atcaatgaat gaaacagaat acatcttcca gaaataaatt cacacaaata 180
 t 181

<210> 120
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 120

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gcttttccaa aatgtgaggc atatggaaaa ttcaggcaac accctgttac ttactcatca 60
cttaagccat gttttggctc agaagatacc aagcaaagct gaatattact gtatttcaga 120
aaggggagta tttcttcagt gctcatcttg ggggtcttca taaaaaatga ttgacagctg 180
ac 182
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<210> 121

<211> 424

<212> DNA

<213> Homo sapiens

<400> 121

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gtgtaatttc tcagaataat ttactctct gatgaaagga gggaataagg taacgagatg 60
ttccctccct cccttctcac attggacctt gtgtgaggac gggacactgg agctgctgtg 120
gccacctgga ccaagagaat caaggaggag ctgacccaaa ccctgatgct gcaaagccat 180
tgccacgcgc tggcattgtc cgcctctgga gtccttgta caagagaatt ataaactcct 240
gttgttgaga ctttgagacc ccatggcgga gacggagggt ccttccactg cagcacaaag 300
tggggcactt gcagtcacat cgcctgtgtt cacggtggag cggatctact gccctttag 360
ggctgatgca ttgcaagggg ctgaacctcc tgcactgtct cctcttggtg tatggagaag 420
gaca 424
```

<210> 122

<211> 197

<212> DNA

<213> Homo sapiens

<400> 122

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tgcggaaatg ctctatatca acacttggcg aaccacggaa gacnngcncc ctaattcctt 60
ttctctgct gtctgctagg ttgagttaga aagcttactc ttcgagatac tactcggtc 120
gctatntgnt tnttgccatt nttaaaaatt tnggtacana ttgattcttc aataaaaagct 180
nnaacataca attaaat 197
```

<210> 123

<211> 146

<212> DNA

<213> Homo sapiens

<400> 123

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atgacaactg gagtctggaa gtacagggaa ggagaaaagc ccagcgcatt tctgaaaagg 60
ggaaggagca tggccctgca gctttntcta gatcctgggt ctnacagcatg ganggaaaaa 120
catctcatcc aatcaaaatg caagcc 146
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<210> 124

<211> 229

<212> DNA

<213> Homo sapiens

<400> 124

gaaacgacna ngccnaatag aaaattttct aaacccccat gaagctagaa aacatggatt 60
agtatgagat gagaaaacca aggctaagag aggacaggag tatctcttct ctacacaaag 120
ccacttgagc ccatttgaaa tgtaactttt gccatggaag aattctacca acacntttgt 180
cgtcatttaa actaccact aaataccttt tctatttttt atactattt 229

<210> 125

<211> 500

<212> DNA

<213> Homo sapiens

<400> 125

ngcgggtgctc caggtgtgaa tggagacgac ttcgagctca ctgtgctgag aaactgcttt 60
tcagagggct tctacagagc ccacagctca tcttctagaa gtcactata gctactgtca 120
gtttctagge ttccaaggac acccttcagc ctactgcaat gcagcttctt accctactcc 180
tccatggaca gatgacatcc atttctgaaa tccagggggc acacttcaat ctatctcatg 240
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ttctgtgagc atagcctctt ctggtcactc gttctctggc atagacttct tctctgtggg 360
ctggtagcga acagtggggc cttcagcatc attattgctc aggtcagtag aaaggaccac 420
ataagggagt atgatatgga ggagccaaga tcactccata tctcgagaag agatgatagc 480
agcctggaat ggtttggtgc 500

<210> 126

<211> 167

<212> DNA

<213> Homo sapiens

<400> 126

actgaggtgg atgcgnccat cttggaagcc atgttaaaga aggcagagcc acaagataga 60
tgcagccggg ttctctaaat caccactggg gagaaacca cacaccaatg aggaataccc 120
atttttgga ttttaagagc aagaataaaa ctcaattgt gttcagc 167

<210> 127

<211> 63

<212> DNA

<213> Homo sapiens

<400> 127

accttcggggc aaggaccttc acaagggatg cagtacatgc tgtgaagaa gaaaaaaaaa 60
aat 63

<210> 128

<211> 340

<212> DNA

<213> Homo sapiens

<400> 128

cccaagctgt tggccaagga gcttcttgac ctgtggctt ctcactcaa tctgaaggaa 60
 aaggagtact ttggaatagc attcacagat gaaacgggac acttaactg gcttcageta 120
 gatcgaagag tattggaaca tgacttcctt aaaaagtcag gaccctggtt ttatacttt 180
 tgtgtcagag gggatgccac ttgaatctcg tgaacctgg gtagtttat ccaaatagga 240
 gtggtcgaaa ccagcagca aaccacaggc ccatctgcat ttctgcaa gggaggatac 300
 agcttaataa cattcagaa acaataggca ttttctgtc 340

<210> 129

<211> 594

<212> DNA

<213> Homo sapiens

<400> 129

ggaaacagaa gactttaaaa aaagaaagga agaaagaaaa agaaaccacc aactctgcaa 60
 agttctctgg aatctgagaa gtcaagcagg gcttctgcct tgtcatggt gacctaacc 120
 tgtgatttcg tctctagaca tgacacatca ggcatgctg gatctggtt ttctgccaag 180
 cttctgaca gtaacgcagg catttgctag tgtatatgga ggaaggctga cttgaagtcc 240
 ccagtacatt tcaccagtg agaagaggac aacctgact ccagaaagcc tttgctgac 300
 ctgctctttg aaaccagtgt gctgcccagg aatcctcgcc ctgtgccccg cctacactca 360
 tccccaccta cttgtccac tctgccgac agcttcagtc aggtctcat cctttctc 420
 acttcattac cactaaagaa agcctcctcc tgggtccca tgcctcagtc tggtccctt 480
 ccgatgcatt tccctgcag ctgtcagtc tgggtctaaa atgcaaatct gaccatgcca 540
 ctctgcttaa aactctcaa tgactatgct aacattaaag atgaagcaga ttcc 594

<210> 130

<211> 152

<212> DNA

<213> Homo sapiens

<400> 130

gtcctaggt ggaaggactt gccttgagtc tcagaagaga ctttgactt ttgagtgatg 60
 ctggaatgag gtttgtcaa gatcagcatt cttatacacc aacaacagac agagagccaa 120
 atcatgagt aactccatt cacagttgct tc 152

<210> 131

<211> 265

<212> DNA

<213> Homo sapiens

<400> 131

cttccaaagt taaatgagat gccagtcaca attcaggatg ccagaggctg gcagacttct 60
 ccaagatgga aaaatgaaca ttatcaagc acctgcttg tacacagatg cttactcagg 120
 caaatgcgtc acagtgaagc actcacagac atgtacagtc ctccaggaag gtcttctt 180
 acctgaaca aattcagatc cttgccgttc caactgttc cgtagcttct cattgtttt 240
 aatagattct tctaaacgct ttctc 265

<210> 132

<211> 374
<212> DNA
<213> Homo sapiens

<400> 132

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ttgatagcaa ttagaaaaca gatatttaga actggagaag cactgctagt ctggtacatg    60
actgagatgg aacagaacaa gaaaattata caaagcagtc agaagaacct gaagaataaa   120
atcagctgga gctactcgtc tcagggaag cgcccttggc tcctcgcgc cgagctgccc    180
taggaagcac gttggactga gaggaggcag caccttgacc tcctgtgcat gctcagggcc    240
ctgcatcaga gccttccttc cctccactct ttcttcctt ttctggctt tcttctctt    300
ctcatcctat aaagaaagta aggtaactta ctaaattaca tacaatcaaa taaagttaa    360
aacatagcca ggag                                     374
```

<210> 133
<211> 496
<212> DNA
<213> Homo sapiens

<400> 133

```
atgagaaaac aggctgggca agngaaatg acaacaaaac cgtactgtaa caaagctgcc    60
taaccacctt gcaaatctac aattgagaaa tccatttctg ttgccctga gatttgtggg   120
gtgtttgta agtagcaaaa gctgactgat acaagattca aactcaagtt tctttgattc    180
tgtctgcatc accatgctgt ctactgaac ttacagccct gattcctgtt cctgattccc    240
aagtgtcctg tctaaaagg agcagagata aatattgnat tcattcattt tctgatgtta    300
taacagaatc ccacactgtt ggtgttctga gtatactgac attccttgac gctagatttt    360
atattggtga ttgcttgggt atcatctctc tctctatga gantagagga ttttctctt    420
attcacttta ttatttata tccataccac ctggatcagg ttctggcaca taataaatgc    480
tcaatggata aaaaag                                     496
```

<210> 134
<211> 197
<212> DNA
<213> Homo sapiens

<400> 134

```
atggagaaac tgagacgcag gaggattaag cacttcccga ggtcacaaca gtgaatgttg    60
gagctgggat gtgaacctga gcagtctggc tgaagagtct gctgtattca ccacacagac   120
gctctacttt tctgacatcc ctcttagagc cacaagatg ccattccttg cctcaggaa    180
tgctcaaggt tcccccc                                     197
```

<210> 135
<211> 209
<212> DNA
<213> Homo sapiens

<400> 135

```
gaaacaaaat ctccagactt gcttccaaag gagaagtttg aatggaagg gagaaagaga    60
```

ggaagggagg gacggcaaga aggaaagaag agagggangga agaaagcaat ggcataccca 120
 tgtttctgtg ttgtttttc ctactacaaa atattaagat attggataat aaaggagcca 180
 aatagtgtca catggctcac gtgtgtatc 209

<210> 136
 <211> 135
 <212> DNA
 <213> Homo sapiens

<400> 136
 gcttatctcc ctttgtgtt cttggagatt aacctgatgt tactctgaga aggctctgta 60
 tgttgccaag tttgaactc tactgaacgg aacaaaaaat aaaagtctaa gaccaaagtt 120
 gcaaaaaaaaa aaagg 135

<210> 137
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 137
 gtctcagttt gcttcatctc tggaatggag atggttctct atgtgatcat gaaaatttct 60
 cccagctctg aagacctttt attttgaag aatcattgtg aaggatggg cttggcaaat 120
 gaatggaaag atgagcaatg ggagaggaaa gaattgaagg gggctgtgag gttgaagaa 180
 tggcatcccc catgaagtgg cgctgaaaga tcacgatagc acagttccgt gatgtgaaat 240
 accacaagtc tgcaattttt cggctctgag agtgtcgtg ggctgagagg atggaaatct 300
 ttcagtaatt ataccagttt gtattcgtct cacatttggg accaaatata aatccgatcc 360
 actctttctc cctgtgaata ttcataaaaa accnaagtgc caatttctgg tctaatactg 420
 tatggaacca aatatgttna tgaagcctaa gtatatactg g 461

<210> 138
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 138
 gcattaagct agaacntgag gaaagagaca ngctntggcc tgaactcaaa acttagaaga 60
 catgagacac agagaggggaa tgaaagccac agagagagaa aatgaatctc aagaggagga 120
 caggactgta ataagcgaca tcatgaagtt agaattctcc agcagaagac tgaaatactg 180
 taactgacag taactgacca tctggaacac tataaatgtc ttctttactt cttactttgt 240
 ttattgttt gcttgcttgc tttaaaaaaa aaaagtataa 279

<210> 139
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 139

gngatgacct caagaggact cctgaattaa tgtctgtaca gtaacttctc agagtctggt 60
 taccagtttc ctacgtctt ccggcacatg gaccatgatg gctgccccca gatggtgcct 120
 tcagctcccc agtcaccatc actgtggtat atgctgttgg tatctacccc cgatgccttt 180
 actgggctga tgccttattc ttgcagctgc tgtgggtgtc agttaataac agctcatatg 240
 tgtaccctt 249

<210> 140
 <211> 593
 <212> DNA
 <213> Homo sapiens

<400> 140

gtgttttca acgaagtgc aaattttcc tggctgattc caagaggaaa ccttcaggta 60
 catatgtgag tctccccacc actagaactc ttaagtggct gctgttatgg aaggtcaggc 120
 tcataatcac tgcataataa gtccttaaca gcaatgtctg gctcttcatt aatctgtaaa 180
 ctactgatt taccgagaga tgtcttgggt tttctggcg tttttcacc tacttctcac 240
 cctggtgcca acgcaatttc cagaaaatga aacaatgatt agtttatgct attgcatatt 300
 aagtttgggt ttctctgtat ttacattgca tgtttcaaag gtgacttaa tcagctgtga 360
 gttgttatgc agttagtcag agtggaattc ccacagattt ttcccccaa tgtatcacat 420
 aacaataaga gagctagaca caccttgtgt agttttaaca agtcttcgca gtttactta 480
 attgnttcc ctccctttt acccctgagg ctcccaaage aatgaacca ttcaggagca 540
 taaaacaagg ggaattagtt tagacttcaa taaaacacag acctcttgc tgc 593

<210> 141
 <211> 206
 <212> DNA
 <213> Homo sapiens

<400> 141

tgaagagaat gggagatgca acatgaggtc ctggagcagg cagactttgg aagctgacaa 60
 ccttgagctt gcctttgggg tctgtgagtt tgtggagaaa gactctccat ctctgaccc 120
 ctggtgtttc ctctcctgta aaaagggaac cgtgggtgcct ctctcgaag ccaatttcaa 180
 gcactgaaat aaaccaatgg gcttag 206

<210> 142
 <211> 34
 <212> DNA
 <213> Homo sapiens

<400> 142

tgagccgaga ttgtgccact gcactccagc ctgg 34

<210> 143
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 143

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ccggcacacn aacaagctgc ttgggagtc agaggaagac atcggcagaa gancacacag 60
cggctggnc tcnngaggnc attgggagga gcacaccagc agaagaacac accagcngac 120
nctggnaagt cnaccgcan aacaacgna agnttggcca gggtagttgg aggacagncc 180
agccgctggg tggcccaact ccaggggaaa accaccanct tncactnca tccccgtnc 240
gtctcccca tccacttgc tgagagctnc ttccactcaa taaaacctg 290
```

<210> 144

<211> 189

<212> DNA

<213> Homo sapiens

<400> 144

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tgatgaagaa tgatttata caatgaaaga aacaagtc atgtttcttc atccatggca 60
atattctccc tgccttcaa gaaagattga aaangtctt cagattgtag taattgaaa 120
agttgtaaaa gattgtaaaa tagaggcata ttatcagat ttgggggaat aaatttttt 180
tgaaaaagc 189
```

<210> 145

<211> 570

<212> DNA

<213> Homo sapiens

<400> 145

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tgagggtca aagccaatn nagaaatnt tcaagggtc ttgtaaaaa aaagtgggaa 60
ttttgggaa acccaagtc ttcngcctt naggggggga agcatcttgc ttggaaggt 120
ccttaagggt natttggat cctcantc caanagaagg gggccctggc tccaatccc 180
ccagaaaggg aaaggggaaa atgcttgcca ccaggaggna gggcccaaaa taaaggaaat 240
tcttaaggaa cangggggct tgggctcaa gtattcccc ccgggccctc ngngaagcc 300
aattttagaa tcaaccccc cttttttt gntcccaaaa tcaacctt tttntacca 360
ccaagcctgg gtcccatc cttttcaaa aacccctngg attcaattt aaaaaantgg 420
ggggccaggc ggggccttct tgggaattct tttgggggg tccttcaat tttctggna 480
aangtctcc ccaattngt nancaantaa caaaccttc ttggaatca aaaaaaac 540
caattnggg gaatnggcc ttttcctt 570
```

<210> 146

<211> 770

<212> DNA

<213> Homo sapiens

<400> 146

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tccttgga caggtngca cacacagga aatctcaacc atttatgaaa taaacctgca 60
agcagggtt ggaccacccg gggatctct tntctccct ccaaatgcc ttgcaggtg 120
gatatttgg ggactaccat tatgccagt ggggaaggaa gcttggaag gggaagcctg 180
gtttacaaa accctcaagc ccatttaagc catccccaa gctctgttc tttttggag 240
gaaaaggaa ggacctgga gnaaggggaa aagggtggg tatttggag gaaaaaac 300
aaaaagcca ttccaagcc ctttngta aaaggcctg aagccctn aaagggtcc 360
```

ccccttcttc ccaagccccc ttgggcttgg accccccagg aacccttcn gttttcttt 420
 tcttctggg cattnccaaa cttccaaan gggaatttgg ggccctngnt ttccccctt 480
 tttnaacctt aattagcct aacccaactt cnangcttcc aacttctgcc ttggaaaaga 540
 aaagggcaag gaagccccaa ncggcccttt ccttgggggn accaaggttt tcccccttc 600
 nggctttacc cttaaagggg gcaaaggncg gaaatnggaa gtctttttt ttcaattcg 660
 gnaaaatggg aggctnggna attttncctt cttcacntta tngggnaaca aaaccaaggg 720
 ggggccttta aancaaaant tttaaattaa aaaatantgg cctccaaccg 770

<210> 147

<211> 449

<212> DNA

<213> Homo sapiens

<400> 147

gaacaaagat tgattctctg gcacacaggt ttacagacaag caactgttgg attagagcat 60
 acaggagcat atattgtcct actgccccct gtggtagta cgattgtct gactagctag 120
 ttattaatag ttgtccctt ctctaccac ttcaagccca ctcaaccag ctcttccaa 180
 atgtcaaga gaagacttca gaagaaattc aaagtttca aaatgatgtt ggattgaaag 240
 ttctgatgat gtctataaa ccaagagttt gcaaactgtg gccaaatcct gctcaccctc 300
 tgattgtga tagccccaag ctaagaatgg ttttacatt ttaaagtagc tggaaaatat 360
 caaaagaaga gtaataatat tttgtgaca catgaaaatt catgaaaatt caaacttcag 420
 tgtcccgtaa ataaagctta ctgaacacag 449

<210> 148

<211> 256

<212> DNA

<213> Homo sapiens

<400> 148

gaaagtagta gatcatccaa aaaggcgatt tggatcccc atggatcgga ttgtagaaa 60
 ccggcttcca aattccagag gctaattgac tccaattatg caacttcctt gggtgaaatg 120
 tcacagcaat atggaagatg cttactgaa gttattcaca cttcttaatg attaaacttt 180
 taaggaactg accttctgca aatccttcc aaagcttgaa cttcagtcca tcacattaca 240
 gcattgttac agcttc 256

<210> 149

<211> 393

<212> DNA

<213> Homo sapiens

<400> 149

ggaatctcat caaacaacca gggaggatca accaccagag aaaagaagag actgggagtc 60
 atcaccatgt cccaacaga attttcatct atccttctga ggacagtcc aagtgattac 120
 ctagaggact ttgcttcata ataagtcaac cttacttct gtgcagcccc acctctcacc 180
 ttcccaaat gtctgcctcc catcttctgg gtccattcat tctctcaaat gatttctgc 240
 ccctcaaaag aattttccac gtctctcctc tctccctcc cctgggaaaa agcatatata 300
 agcttctata ccaccttggg ttattgggta atcattctcc agcaattctc ccatcctgtg 360

cacatcaaat aaattctgta tgcgttttct ttt

393

<210> 150

<211> 488

<212> DNA

<213> Homo sapiens

<400> 150

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aaattagttg ataacgtctt ccaggagacc tacggccatc ctactgatat gaaccagatc 60
atacctgccc tgatgggatg ccagagaaag actgctgcaa ggtacgcgcc actcacagac 120
ctctccattt atctactga tgcaaaggac cctgagtagg gatcctctgg aaacagaaca 180
gaggggaagaa gataccttcc ctgaagccca gatgttccag aagcctgcgc ctattcaca 240
aagtcacccc aaaaatgccc tagagtttgg agttttgaag aagcgggaag aaggcctgag 300
taagggcctg ggaaccaagt tagatcctac ttcagcatca gcacatgcca gcgatggtgc 360
acacaggttg agagcggcct gcccgtctt tccatggngc ccacagaccc atttaggatg 420
aaagancana aaatttttt ccntgtaccg gntntggaac caggggaaat ttatattgg 480
ggcccttg 488
```

<210> 151

<211> 443

<212> DNA

<213> Homo sapiens

<400> 151

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atctctattgt ctccatcaa ggaaataag caaactgaag tgctagccca ccagctctgt 60
ccagtcctcaa caagcaagg ccttctctg atgtcagaga cctcaggtg caagaaatgc 120
gaagggattc gaaggggcat gctacaacct aaatggaatt ctttaaaaa gcactgtgca 180
gcagaaaaga caagtatagt ggctatttaa tcattctcac tatgaagtgc caattcttta 240
gagtcctatg acattcatga atgatgcagg aggcggacat gatgaatgca gagcaattcc 300
ctgcgacaga tactttcagg gaatttatgc cccctcccc aagaacaaaa gggtcctgg 360
gctcagttat catttgtct gcgagagaat ttacagtctt ttacgaact tcntttacc 420
tactcataaa gcgcttattt tga 443
```

<210> 152

<211> 290

<212> DNA

<213> Homo sapiens

<400> 152

```
atttgcaag agtgggaaag tgagcattga gcatactgga aataccaaac gcagacgccc 60
tgggatgagg gtccgcttgg cgagcccagc aagagcaata aggcctgagt ggtggaagtg 120
gggtatgcaa gaacgtatca ttctgttgc tttacctgc tgcttaataa cacgcatgta 180
ctgtctggca ggaataaag agattacgtt tcaaaaaaa aagggccagn gnggccantt 240
cagttngnan ttanccagn tgaacttgn naaanggggg ggactacca 290
```

<210> 153

<211> 508

<212> DNA
<213> Homo sapiens

<400> 153

```
ggtagctggc acaagttct ctggattaag gcatagaatg gtgtggatga tatgccaaaa 60
atctaggaac tctctctct ccagctggaa agaagaagca ttattacct cacagtttct 120
atgactaaag aatccgggag tggcttagct gggtagctg gatcacggtc tctcaggacg 180
ctgcaatcaa gatgttggt gaggccatgg tcatctcaag gtcagtttg gggaggatcc 240
acttctaate aaaatcacia ggaaacctga tggcatggta cctagtttcc ccaagagcaa 300
gcaatccaag aggatgagac aaagaattta agactgaagc cacagtcttt tatcatttca 360
tctgttaga gttatctat cagttttgaa gtctcantgg tttagaacc agtcagtaag 420
tcaccacac tcatatgagg gataccaagg tataatgccg gacagattg tgaagcctct 480
ggagctgctt ccattggctg atgatctg 508
```

<210> 154
<211> 81
<212> DNA
<213> Homo sapiens

<400> 154

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agacgtggg gagctctga ataaaaaaaa aactngntna tgggacgcat ngaccanaa 60
agcagacctg ggcccacaac t 81
```

<210> 155
<211> 416
<212> DNA
<213> Homo sapiens

<400> 155

```
gacgtttgag gtctctggca atgaggatct tctacaatg ggtgcaacaa attcctgggc 60
cttcagagg ttctggatgc aaattaagtt gttctcagc ttccccact gctggctgat 120
ggttgagatt tctgcatct tccagaagca aaatatgctg aaattcaaga actgggcatg 180
aatgactgtg tcactgccca gagctgagcc acctccaagc agtgagccag gccaatcatg 240
tgaggccctg ccaccttcag acagtgtcct gtccccctc accaggaaca aacagaggac 300
ggcctgtcgc ctctcagtc cctgctgcc tcagacttcc acatactct tatcaagttt 360
tacagagctt ttctgactct gtaacaaaca gtcaaataaa aatgctggtg ttcccc 416
```

<210> 156
<211> 403
<212> DNA
<213> Homo sapiens

<400> 156

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cacattggat caaataatat cagaagctct cccatctgtg atctgtctat agccttacca 60
ttagaagcct caccagagcc aggcagctgc agaagcctct tttaaaatg gtttagaatg 120
atgactggac ttggcagcaa ctgtcttgg aagcaccaaa caaaaagtgc tatctggtgg 180
ttgattgat taactgcaat ctagacatcc atttgtgga ccgtattcac ataagcaagc 240
```

agctgcaatc caggcctctg ttgggggtg ctgagctgag ccaagacatt cactcttcaa 300
 caacaaaggc atgttgggag cagccaggag cagttctggc gcttgggagt gaaggaatgt 360
 tctgccta at gagtgccaga tgaataaaa tctttgatat att 403

<210> 157
 <211> 104
 <212> DNA
 <213> Homo sapiens

<400> 157
 gngcacattn anganccaaa gncatgactg actccccgna tttcacacct cantntttaa 60
 gngganaant atctgaacta aaagctgaac tcaacaatga aaag 104

<210> 158
 <211> 636
 <212> DNA
 <213> Homo sapiens

<400> 158
 gctgcggggc accagctaaa ctctctggga agtttgcagg aggcacagat acagccttaa 60
 ccttgacgag tcttccatca gagacatttc aagatgcagt atgaaaacta aaaggctctg 120
 ctctaacaga actttctgcc cagccataac acaaagatat caagaagaaa ataacaaaat 180
 actgtcataa gaaaatgtaa cacaaataaa gatacagtac tccaaagtac cgaggatgcc 240
 aattataact taccaatata acttcaggat aaactctgac atctcctttg tgcaggagct 300
 gctattaaca tcaccaggaa gctggagacc cctctccat tgagcaagat gcaaatgttt 360
 aggggaaagg tgagaaagga ggatgtctct gcaggaaccc aagtcacat gctgtggtgt 420
 ggtcaaacca gtgactctca ccatgtaggc agccagtggc tgggggatgg ctgctgctgg 480
 tgtgatgacc cctctcata aatttaaact taaaagacca tctttgatgg tcacaagctg 540
 tgtgatctct gctcaccacc ttgtctgat catttccaa gtgagaacca cgaataatat 600
 ttactncta tgactttat atncaccacc aaggat 636

<210> 159
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 159
 aggaactcaa tttttattca gcaactgacta ctggcaagc atcattaaat gctgtatctc 60
 aatggattct ctattatag ctgtccatac tgnggagggt tacaggaaaa ttctacaaat 120
 gccacaact ggtcaaatat agctggatac attatctgca tgtttctgg tcctacacaa 180
 atggcctata aaagcaaaat aagaacatta gaatgcataa tctgaactcc attaagttct 240
 ttactgtgta tatattgtt taaccacaga atcttaaaaa ctgtcttatt ttatgtatta 300
 taccatctt tctgagccct aaaggacaca aactatttta aactgttata gaataaagta 360
 taggctgaaa ctgtaataca gct 383

<210> 160
 <211> 162

<212> DNA
<213> Homo sapiens

<400> 160

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atgcaacgcc aggagcagca tcagccacgc tgtaaacaag ggggaaacgc caagcgcat 60
acagaggacg tcagccctgc catcactggg ctggggaaac aatgccagct atggctggc 120
tccgggttca cagtataag ggaaataaac ccttattgt ct 162
```

<210> 161
<211> 276
<212> DNA
<213> Homo sapiens

<400> 161

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caggcncaca aacaagcgc tgggagtcaa gaggaagaca tcggcagaac aacacacagc 60
ggctggncat cgngaggaca ttngaggag cncaccagca gaagaacaca ccagcngaca 120
ctggnaagtc naccgnana acaacggnaa gnttggncag ggtagttgga ggacagncca 180
cccgtgggt ggcccaactn caggggaaaa ccaccantt ncnacttcat cccgttctg 240
tctcccat ccacttgc gngagctact tccact 276
```

<210> 162
<211> 284
<212> DNA
<213> Homo sapiens

<400> 162

```
gtaccctaca aacatcatca gccatcagc tgtgtgccac aggaaggctg ggaagcacgg 60
ggtgtacaga aaacaagcaa ggaagagaaa aggcactgaa gcagaactgg tgaatcaaca 120
gtgcctgtta aattggcaaa tctgaaaca ctcaacaaga acctggctc cagaggggac 180
aacacaggtc ataaaacttc cagggccact gacctatta tgtgactaca aaggtttatc 240
attagtcca aaattgtgga ttaaaaataa attaatgcc atgt 284
```

<210> 163
<211> 209
<212> DNA
<213> Homo sapiens

<400> 163

```
ataatgcaag ttctgaagtt ctgaatgaaa aaaattaagt gatatttact attctacagc 60
gacttgttga ggtgctaagg aaagccatgc gatgccacgc ctggcaacaa acccactg 120
cttcaacttc ctgtgaagaa agccctacca tgatcccccac ccacattatt tatttgacg 180
acccaaacaa ataagaaaaa gtagccagg 209
```

<210> 164
<211> 184
<212> DNA
<213> Homo sapiens

<400> 164

cacttggcgc tgctgacgta cagagcaagc aaagccgctg aagttcaaaa cctgcactga 60
atctatctca aacaaagaat gccaggaccc actgcagtga ccctaggat gaagacatgg 120
aatctgttat tatgcaatgt cacttaagta tgtctttat attaataaaa aagttcgtct 180
tggt 184

<210> 165

<211> 341

<212> DNA

<213> Homo sapiens

<400> 165

gaaagaacat caaggctcag ggtggtggga ctctacttcc ataagagcaa tgatccattg 60
ggtgaccagc acggattgtc ccacagcccc cgatggaaac attcagaggt gaatgccttg 120
ctcagagccc cctggccagg ctgaggaggg aaaaattctg cttccaact ctggcaagaa 180
attgtgcat ccagaggctg cagaagccca cgaggagcat gaagatgcgt gggaagaata 240
ggcgtgcct tgagtgcac cctgagccag acccttacac acacagcttt cattgttggc 300
tttgtgttt tttttttt ttaangnaaa aaaaaaatcc c 341

<210> 166

<211> 419

<212> DNA

<213> Homo sapiens

<400> 166

agtctgcat taagtcgact gaggtggata atgaagtga aggaagcaga agagagtgtt 60
atagtggaa aggtgggaaa tcacccctc catgtgaag ggaagattc aggttccaaa 120
tgacacgttt cctcagaat gacttttgct gtagtgacca tggatatctt tgctgtgttc 180
ctgaaactct gcagacagtc ctaagggatc cagtgggtcc tctgatggac ccaatgctg 240
gaagtcacgc atatatctct gaagagttgt cacaagaaat ggcgtttctg gaggatgcac 300
aggaaacttt tcatttgga tgaaaaaggc tattggattt gcaaagactg cagaggaaga 360
agtttaaatt cttgagcccc ctaaaaaaaaa attttaaaa aagnggcttc caacctttg 419

<210> 167

<211> 177

<212> DNA

<213> Homo sapiens

<400> 167

agaactgagc tgacatggac agaacttcca gcaggacctt gaatgttaac gcattacaga 60
tgccagaacc tctgtctacc taaggccctc agtgactttg tgaagcagag tctcacctcc 120
aggctggaaa catcctggac tattacatga acaagaaata aacttcactg tgctgct 177

<210> 168

<211> 439

<212> DNA

<213> Homo sapiens

<400> 168

```
gatatgaaca cgaagcaggc agaggatgaa gctgatgggtg tgcatgggtca ctgtgctcct 60
gcccattttt gagcttcttg aatacaagct gtgcctttgc ctggaatgtc cctcccagtc 120
tgactaggca tcttctgatg ggggttgacc tgggtgcttc taactactagg atggacctct 180
tggcaatctc tggatatctt tctgtggttt gttataatgg gagaagaaga agcactccca 240
tctagattgc tgtatcagaa tggactgtta tgattgcaaa tggcagaaac ctaactcaat 300
gcaactataa naatgaggga aatgtcttgg cagctcttga aatccatgga agaacaaaat 360
gatccagggtg ctggagggac agcaacagag ctggacctca ngtgctgctg gagccagagg 420
ctcaatttct actagtctt 439
```

<210> 169

<211> 393

<212> DNA

<213> Homo sapiens

<400> 169

```
cttctgncac gtncggggtc ccagagtgtg cctgctcaga tcccaaaaaa ctgcnnggan 60
caggangngg tcacanagtg gttaagggga agggagaaca ggaccggcgg gtttctttac 120
cgcgggtcaa gaacccttga aagncntctt cggcttcattg taacgcaaac ttggcccaca 180
ttacttttc cccatgggcg gcccgaagtc cgaaccaga tgcctctccg acgacagccg 240
caaagcgtaa ggcagggtcg tattccagcc tctaagcgct ttacagcgcc agatggctcg 300
cgcacgcgct gcgtcttagt ataggtcctt gttaatagtt agaagtgtctg ttctcattga 360
tataggaaaa taaactact tgtatgtctt atg 393
```

<210> 170

<211> 227

<212> DNA

<213> Homo sapiens

<400> 170

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cacctgaac tagaangggg aangnaangt gccttgngan tcacnccggcc acaacgaaaa 60
ntagttgagg cncggcgccg ggggcttcac gcttcttaat cccagcactt ttgggaaggc 120
ccgagggtgg ggaaagaatt ggctttggaa gcccttgaag ttcaagaa cccagccctt 180
gaagccaagg aagtgggaaga aaccgccccg tttcaaact agggggg 227
```

<210> 171

<211> 808

<212> DNA

<213> Homo sapiens

<400> 171

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gaccttctgg ggggagncta nctggcattt angtnacagaa cctgcccctt tctttttaa 60
aaagaacaac ttaaaagnat ctgggcaacc acttgtgcc caaagcttct tcttaaggg 120
aaagaagaat tggtaaaaag tgttgggtgc cctgggaccc agcaagcatt angccatcac 180
cttgggggacc caagttaaga aaatgggaaga atgcttcaag gcttccatcc caagaacctt 240
gcttgggggc ttggggggcc caaccaatc ttgtgtttt acaaggggcc tcccttgtgt 300
tgactggtng atacgtggat gcttccaagg gtaaattggg cccacttgaa agaaaagtaa 360
```

aaaggaactg ttctacacct taaaagaaag ccaaagggga cctcaaatta caggccattg 420
 cggtttactt ggcattatta tcaattttaa aaaatattca aaaattaaat ggggaaagg 480
 gaaataaaaa caccagggct taaaaagggg atggaattta aaaaaaaaa agaagttaa 540
 aaaaaaaaaa aaaaaaaaaa aaagggccan gcngggggcc caatttcaan tttnggaan 600
 ttaaacccan ggcnttgaaa cntttggttc naaaaaagg gggggggggg aacctncccc 660
 cnannnnnt catcccnenn tcacnatnt nttgnnacnt tacttgnntc ntctacattc 720
 ntganctaca acattcatet tatntantta tntatcncn tnacnncn annttttnc 780
 acttatttnc ccanncttat atatatac 808

<210> 172
 <211> 649
 <212> DNA
 <213> Homo sapiens

<400> 172

ttttaggta caagaacctt gangantttt ttggacttgg ctggncatn gggccggtgc 60
 cccttcttgg gangaaaggg cccttngnat tgggtggaatg ggtggtccaa cctttccaca 120
 aagtaccttc ngggccaaaa aggagggggg gaccaaagtt tcaaagctca aaccaaaggt 180
 caagaaactt aaaagggggag cctgcttgac cccggggggag ctgcccac ttcttgng 240
 gggaaaaaag gggaccaaga atggaaagct tnttttcca agaaaagctt gatggaagcc 300
 aaccttggga ccagcaaaca agggggacca aacggagggt gggaccttc ccaaagaagt 360
 acttgggtgt ctctctgtgt ccttgcacgc ccattgatg ttgtaaccg aaattcttt 420
 tgaaggggc ttcccaaga taaagcaagc ccaagggaa agaaaaatga aaaactcctc 480
 ttgatgttgg gtttgggggg ggggtcttgc caagcttgg gggccctccc ttgtcgcaa 540
 gtgggggcca cttttttt tttnnccct tgnntcttt aaaaanccn nctttggntg 600
 nctnnanca anggttnaa taaaaanaa tttttggga aaagtttt 649

<210> 173
 <211> 271
 <212> DNA
 <213> Homo sapiens

<400> 173

ttcccggag tggggatag aacagcccgt ctgggtcct gngggtggaa gccnatgtgt 60
 ggaagaatgg agggcatcgg ttagaaagga gtctaagtc ctgatgggca ctgagctgca 120
 agaaccagcc tgggtctgt ctgctggatg tcacttacta gagagcgaaa ttaaatgtgc 180
 ttcagctact gttactttgg gtttctgtc attttagct gaaataatcc taatcaatat 240
 gagatatatt aagtaaaca aaatgcaaat g 271

<210> 174
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 174

caggaaactg gnagggaaag aaagaactgg ccaaggggga ccaaattctt ggttggaat 60
 ctggggcca ngaaaccct taanggagga ngantcctgg aanttgaaa ncttaatggt 120

tatttaataa ataaaattgg tggtttaatc ttcaaatcc tgggggcat gggcaccaca 180
 caggggaaac caatttctgg gcctggaatg gcttgcttca aaggcttctc cctcttttgg 240
 gaataaaata aatgggctt tcagggtttt tc 272

<210> 175
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 175
 gactgagctg ctggcctgc agaggaagcg ggaagcagtc agatgcaagg caccaggtt 60
 agaattcaaa tgctgcaggc accggggtct gcatgacagg acggctcagt ttacgtgta 120
 gctgaggaaa ctgaggcaaa gaggacgagg aaagctgccc acaatcacc tgctatggcc 180
 caggactgca gttcagatcc caggacttcc aggctggtgc ttttccacc acggaaaata 240
 ttaaagacta aataaactac aacatt 267

<210> 176
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 176
 gcatgagcac caatgactaa attggggaag aggaactcaa ggggagaagg cagctcagaa 60
 tcaaagattg aagaattgta tctatcttca agttcacttt ctctgtcatc tctattctgc 120
 cgttgtcca tcagggtcaa gcagcaagaa gataaacaga gaaaaaaaaat taacagttat 180
 tagccccacc ctaatgaagc caaagagttc cactgggaaa gagcaactga aagctctgcg 240
 ttgaaactc tctggactc agtctcatgt atctcccact ttggctgatg acgatctata 300
 tccttaact gtaataaaca aaccataact gt 332

<210> 177
 <211> 908
 <212> DNA
 <213> Homo sapiens

<400> 177
 caggaaactg gcagaggggg agtctcactc ttggtcgccc agggctggga agtggcangt 60
 ggggtgtcaa taagccangc ttcanccaac aancctcttg gccttcttca aaggttcaaa 120
 ggccggaatt tcttccggc aatcaagccc ttccaagggc aaaaggaatg gaaaaccac 180
 caaaggaaga aaaggccagg aaaggggcaa gaaaaggaaa ggggaccaa ccttggtta 240
 ttaaggaact tgggaatggt ttgggttgg tgccctttca aaaaattat gttgaaagc 300
 cttaatcac caagtgtgg atgaccattt gggatgtggg gggccctttt gggggaagg 360
 tggaatggg ttggatgaag aagtaaaaag ccccgatttg aatggaaac cgaaatcctt 420
 gtccatgcc attggaagat ttatgacctt tataaaaaag aagtttctt aagaagaggc 480
 catcctcatt tcttccacca tgtggaaggt ttaccaaatt ggaaaagata agcttgctta 540
 tgaaaccaag ggaaaacaag gatctcacc aagaacacca agatcttgta agggcaccct 600
 tggatctttg gacctcccca agcttccca caaacgggtg ggaagaaaat ttctattggg 660
 ttaataaag ccaagcccag gttggatggg caattttaaa tattaagcaa gctttgggaa 720

ntaggaacaa gggacaacca aaccttaagc accaaaaagg ttttctaag ggatgcctta 780
 cttaaaaagg ccaccgacnt ttaatgggga aagggttaag tngcctcta aaatggccat 840
 aatanttaag ttaaaaggna aagnaaaagg aatgggtgga aaaatcaaat gggatcaaga 900
 acctccaa 908

<210> 178
 <211> 274
 <212> DNA
 <213> Homo sapiens

<400> 178
 ctgccgcctg ccggacacac aanngtctg tatgggggaa gtggaccagg gtentattca 60
 ancccttcc cgtttattcg gangaatgga tggcnttaag taccangnca ncnttngga 120
 gggaaactng ggcctcnggg aaccaaaggt ggaaccctng aagaactggg gtggggcttt 180
 ctaagaaac caagccctt acccaaactg gtacccttc ccctttctt ggctcaagcc 240
 caaataaat taatattccc ttcttttcaa ctcc 274

<210> 179
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 179
 gacgtctggg gagctcctgc attaatcag actngggggc tnccttggtg gccngggctg 60
 ggnccagng acgggntnac agcacacggg cggacctacc tacacctccc ggctcaagct 120
 atgtctctgc ctcagccttc ccagagtgg gaggcgtggg atcaagtcct agattggta 180
 ttcttgctg tgtgactctg ggcaagatac tcagattctc tgggccaccg gtttcttga 240
 tgttacaaaa gcctggttac atttctcata tcaaggagat acaaagttgc tcaaactcc 300
 tcagccacag gaactgtctt attcattct gtatccccag cgtcctgaca cacagtaggt 360
 gtcagtaaa cgttgaatgg atacaaacat gactgtgaag agccttgtaa acatcattaa 420
 ccaaataatg tctatatgta tatatgtag cacttactac aacaggccca taaaccttc 480
 caaatgaca tcaacaggaa gtaaaacctg tttggatgt acccat 526

<210> 180
 <211> 730
 <212> DNA
 <213> Homo sapiens

<400> 180
 cagcaactcg agnggagacg caagcncctc cticggggcnc cggnaaagga atttaaagt 60
 tccgtgaaa tgccataccg ccaaggaact tcggganggt aggtttcccg ggtttcccg 120
 gcggtgggcc catttttctg gttgggtgg ggtggtcaa gtttggtggg ccgggttgg 180
 cttgggtcaa gtaaaccaag cccaaagaat ggcttcggg aaatcttctt gggctcttc 240
 cgtaagatt ggggccaaga agggaccgaa taaagccact tgctttcccg cagggcatt 300
 taaaaaaaaa aaaaggttcc cggaagaaa gccaaaaaa aacttgttcc caaggggagg 360
 gatggatgaa aaattccact tgtatctaaa aggggggtggg ggggtaagct tgatgcctc 420
 cttgtataag aagccaccc attggattct tacaagttg ggtgggggaaa caagcatatt 480

gccatatatt gaagcttggg cttgtgggct ttcatctccc aaaggaaagc caagggaagt 540
 tgacttcaag tcataccaag ccaaatccgc ttgggttcaa gtttcatct caagctctct 600
 tatgggggacc aagtaaatct tgganaaaaa taaacccgaa gctccttctt ttggggggat 660
 caaataattt atttggactt tgtaagttaa acttggcacc caaataaaaa gccaaagtctt 720
 ttacccatgg 730

<210> 181
 <211> 622
 <212> DNA
 <213> Homo sapiens

<400> 181
 caggaactgg cagggaatt tctaaaccgg gggaatgaac aattgggcaa tcaatccctc 60
 aatcaaacca agtacaatcg gcaagaagaa tgggtggcgg gcaatggccc ctgggaacgc 120
 cccaaccaag caagtcccaa tccccggct tggctccttg ggaagaatcc ccttccaaa 180
 ggggaagcaa cccaataat ggaacggccc gcccaaaggg acttccattc ccttgcgcca 240
 gggggccaag gggggcaatt gttcacttgg ccgaaagac ctgctgctag gggggggact 300
 cctcataagc cctcaagccc ttccctcgt ttccaagggc ctctcccaa gggcttgcca 360
 atcaagcctt ctttactttt tgaagcctc tgatttcca aattcccttg ctcttccca 420
 ctccattaaa agaagggcta aggggtggaag ggccgcttc taagggttg ctggggggc 480
 tcttcttgg gttaaaggga aacaagggga aagccttga ccaatctccc tccactacct 540
 ctcccttgt gcttggttac acaagtgggt cattgtttg gatgttaaaa taaaaggtc 600
 aataattctt ggcttctctt cc 622

<210> 182
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 182
 cacacaggac acggtgggga tgcagcatct tggacctcat ccgcctgtgc tctaattcaa 60
 agacaaatat gtttccaac ctgccaagg ctctggcagg gaaaactcag atcccaaac 120
 tcaggctgtt ctatgacgc aataaccagc tgggtttca gcaacttga ttgagccatc 180
 tgtgttccca gccacataa aaatatgcac aagaagggtg caaatcagca agtccacagc 240
 ttccagagc cccagctggg atgtgccctc ctttgggga ctaatgaaag agcccaagga 300
 agtcactgaa agctagatat agcaaatgg tagctcaaca ccagatgcaa ttatttaata 360
 ataaactcta aattgtttg ccccttaat aaaactctat attccaatat tc 412

<210> 183
 <211> 899
 <212> DNA
 <213> Homo sapiens

<400> 183
 tacttcaagg ggaccccncc tncctgaaca tcnaaaaggg tnagnngaac gaagatcacc 60
 gngnacttga agacnggcgg agccggctan aagccggggt acgagcccgt acttggccgc 120
 ttcttagaat ttcttttgc ntctcttat gggggtaagg aagccgcaag cctctcttc 180

ngcccgggaa aaggatttaa agttccgtt gaaatgcat taccgccaag gactcgggag 240
 ggtaagtcc cgggttccc gccgtggcca tttcngttt ggggtgggtg ttcaagttg 300
 gtgggccggg ttgcttggt caagtaacaa gcccaaagat gctgccggg aaatcttct 360
 tggccttct cggtaagga ttggggggcc aaggaaggga ccgaataaaa gcacttgct 420
 tncgcgaag gccatttta aaaaaataa aaagtttccg ggaggaaagc aaaaaactt 480
 gttccaagg ggaggggatt gaatgaaaa atnccacct tgtantctn aaaaggggt 540
 gggggggtaa gccttgatg ccccttcct tgtantaaga agcccaccc atggaattc 600
 tttaccaggt ttgggnggg gaaacaagca ataatgcca ttataattga agccttggc 660
 cttntgggc ntttcattt tcccaaaga aagccaagg aagtnngaac ttcaagtc 720
 antcccan cccaaatng cctttgggg ttnaagtt ttcaattc naggcntnt 780
 tctatnng ganccaaagt naaatctt ggataaaaa tnaaaccc gangccttt 840
 ttnttttg gggggattcc aaaannant ttaattnga ctttgaag taaacct 899

<210> 184

<211> 324

<212> DNA

<213> Homo sapiens

<400> 184

aagacatata tgatgtctg ctgggaccc agcaaccatc ttggaccacg tgaaaacct 60
 ggggatggaa atcacatgt atggatggcg aagaaaacta aaagcgctg agtcactgat 120
 accatttag agctaccata taagcctctc ttaagcctc ctttatgaa agaaatataa 180
 aattcatct tctgaattc ctatctgtg tactagcaat tgaacaactg attgccagc 240
 catctgaatt acccagattg tctgataatt ggtcaatacc cacttcatt taggatatag 300
 aaataaagct tcaaaactgg ccat 324

<210> 185

<211> 176

<212> DNA

<213> Homo sapiens

<400> 185

ggtcagcaga gacaaaggca atgttggtga ggccatgtac atttcatct ccttgagctg 60
 gtactgtgag caagctgtc atctctccac gccaacctca atctctct ctaaaaagg 120
 gactgatgct acttctctaa tctgccatg accttgcaa ataaaact taactg 176

<210> 186

<211> 268

<212> DNA

<213> Homo sapiens

<400> 186

gaaacttta tacatcataa ctattcatta atgtatgcct ggcaaagatc aaatgtcaga 60
 agatttatt agccacagac actgcaatt aactacattc atgggacaac caaagcaaga 120
 aagcctcatg tttggggga aagtttgata tcagcaatgt ccagacaagc aagtgcataa 180
 tggaaacgaa cttcatggaa cccaactcag acaggattga cagttgaaga accaactctt 240
 taattgtgag aaattaaaac aaatctac 268

<210> 187
<211> 221
<212> DNA
<213> Homo sapiens

<400> 187

```
aatctcactc tggctgctat atggagagta tactggagaa gaacaagaat ggaaggaggg    60
agccaagttc agaggtgaac aagagctgtg agaagactct gaggccttag gaaatgggaa    120
agctaccggg caaaaggatc ctggcccctg aataactgca cagctctttg ctggctgca    180
ctgggatgcg atgtaactga taaataaaca tttcttatgt t                    221
```

<210> 188
<211> 540
<212> DNA
<213> Homo sapiens

<400> 188

```
agttggatgc tgaacttgc agtcacacaa ggacttgaac ctagagcttt tctaaagccc    60
gtactctttc cagtaccctg agccagggga gccagcgggc agaaatgacg tgtgaggtac    120
cctctctctc ttacttcca tgtgatctgt tactcatttt gtcaagacat cctgggtccc    180
agagaccact ctattccca ggtgtgtgac ctctcctac agactacagt gggaaagaca    240
ccatctccag gngccaggng ctacacaaga tactggctat agcagcgaac aggacagccc    300
cgtcnattct natngngngn ccaggacaat aagaaaaaag acttttttat tttatttt    360
ttgaaacgga gttttgctnt tgtttgccca agctggaatg caanggtgtg atctcnatna    420
ctggaacctt cggttccaa gttaacaat tattctggct caagcctntt gagtagctgg    480
gattcangca cctgccccac tcccgggtaa attttgggn ttaanaaaa aaaagggttt    540
```

<210> 189
<211> 258
<212> DNA
<213> Homo sapiens

<400> 189

```
gcatgtctgc agaaatgatc agacgtatgg aattacaaga tctcctgctc gtttagggtg    60
ttcaaggaaa tcaaagaact gtggaacca ttactgtcca ggaacaatg ttgtctttga    120
aagcctcatc acctaagaca tgtctctgaa gtagatgaaa aagccaaccc aggcatagtg    180
gtggagccca gatgtctcac atgtttagca tgagctagaa gacactgttt aagtaaaaat    240
gactaaagcc agcctgcc                    258
```

<210> 190
<211> 334
<212> DNA
<213> Homo sapiens

<400> 190

```
gacactggct cataagggat tcaatgtgc acagagcaac tgcctcctca cctccctacg    60
gattccacta caaccatcta ggaggaccac agcagcatcg tctagccttc ccttcccc    120
```

aggaccctgg gctgggggtgg aggaggaggc gccactgcag atccagtatg gtgagaggaa 180
 tctcatggct tccaccagaa tccccaaaac cacagcacat cagtttgcta gcttgcacaa 240
 aagccttcac cggatgtctga gcaggtgctg ggcctgtgcc ctggacttn ccaccctca 300
 gaccattaag tcaantaan ttctttctct ttat 334

<210> 191
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 191
 gagctgagct gggttttaca gagttaccgc gaggatttct gttgtgggaa aatacccagg 60
 aagtgactga gcccagccag acgtcactgg gagacatgca gaagaaaaga ttttcnttg 120
 ggagttaccc cacaatgagt tctgggtctg gtcaaatcac ccattattca aacacattgc 180
 agccttctg tnttttagga aatcaaacag aacttcagca gtatgcagng aggccatttt 240
 aaacagngaa atcaccaacn taanncccaa ntttngaaa ncnnggcctt aatnncccn 300
 caaaagggaa ncttgttacc nggnaaaaaa ctggaancaa nanggccagn ttcccttggt 360
 ggaccccctg 370

<210> 192
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 192
 ttacgtgtc atgagaaagt tgagtgatga gaccttgagc gggaatcatc aatgaaaggg 60
 ccaaggagat gagatggagc attgtaatca acaaaagtgc taaacaccaa gaagtgttgt 120
 cccatatttt attacacttg agaatgtctt gctattttag acgttacaag gtatggcaag 180
 acagtcttgt agcagtgtca gaatgattcg ttgaaatgca ttaatcaga aataaaagat 240
 gctgttaata actgtcac 258

<210> 193
 <211> 190
 <212> DNA
 <213> Homo sapiens

<400> 193
 gtctcatgt gcccttgagc tgtggactcc aacactgctg ttgcaaaaa gaagatggca 60
 ggaaaggatg gccctgcaaa gtgtgccatc atgagtgagc atctctgtct actcaaactc 120
 tgatttttc actgcagccg acttagtgag gaatatgggc gcactaagtt ataaaatata 180
 agaatgacag 190

<210> 194
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 194

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agaactgagg ttatttttgc ctgctgttta tgtcatgaac caggagcagc aaaaacatt 60
aatcttgcac gctaactgac tgataatcac tgatgtagc tctatgctaa ggattctgag 120
accaccatgg gactggatgg aacagcatgc tgtgatctgc taatgatgtc tgctatggac 180
accacaagca tacagagtga acctgcagca cagcaagaaa acagagcacc aggctgtgac 240
ttcacagaag gccctgggag ttgcagggaa gaacagagag tcatggcaca tgaggctaca 300
ggaaaaatga ttttaaaaaa agaatgataa ttataaagca ttattgagc act 353
```

<210> 195

<211> 326

<212> DNA

<213> Homo sapiens

<400> 195

```
gtctctgect cctctctgtc aggaaggaga gagagaagtt aaccacacag aactgaccac 60
cctctttacc cagaaggagc tgatcagcca tcttaggca gaaggcttcc tccagctgca 120
cccagattcc ccttctgtct cccacagcac cctgggctta cttctccaga tcatgtaaca 180
ccctgtgcta agattgntta tctcttgnct gacttcttga gtggatcata agctctttga 240
atgcaggcat tngtcttct cactcgcaac atctccagtg ttgaggacag aagtgccac 300
agggcatagg atatactcaa ttaagg 326
```

<210> 196

<211> 303

<212> DNA

<213> Homo sapiens

<400> 196

```
acaacaagct ggtgagcagc ctcagcctgc ctctttgtt ccatcagaga tgctcatgtc 60
atcggggtac gcaggacaat ttttcagcc agcatccaac tcagattatt attcacaatc 120
tccttacatt gacagttttg atgaagagcc tcctttgcta gaagataagt taaggaagtg 180
ttattaatgt gtgtacagct agaagaataa tagcaataat tagcacttaa tgtgtgctgt 240
cagcctgcag tatacagtgt cttatgtttg attgtttcac atataacaag agtttgctga 300
acc 303
```

<210> 197

<211> 170

<212> DNA

<213> Homo sapiens

<400> 197

```
gtatgacaca cagcatgtct aagcaactgc ctccagcag tgattgatt tgctggttcc 60
ccacacaaaa agtttgaag agacccttat gtcttctgta gagtttcttg gttgtaagca 120
gcaagcactg gtgctggcta acttaagcaa ataaagaata tatcactcag 170
```

<210> 198

<211> 342

<212> DNA

<213> Homo sapiens

<400> 198

tgagatttat agtgcctcttg gggaggctcc tggaagaagt gatatatcan gacagacata 60
ctattcaaaa gcttaanact tagcatctga ctataaacac catgccacaa agaagcttgg 120
gatgaaggat cagcaggcga gaggagtcca gcgcccagca caccactgg gagctacatg 180
catganaccc cacccaatca gnagaacct acngccaaca gaattatgag aaataagaag 240
ntgnngnngg tctaanccac taangcttgg gaggggnttg gtnnacatcn ataggnttcc 300
ttgcttggnna ctacttcaat catttnatgt ttgagagagg cc 342

<210> 199

<211> 280

<212> DNA

<213> Homo sapiens

<400> 199

gaccagatta atgaagatca cagctgggaa cacctgtgat cacacctgtg aagaccacac 60
ctgtgattat gagagaagga aagaatctcc atggaagaag ggtttaagga ggatggggct 120
agagggggaga gaattctggg ctgattcaga gtctgtagaa gaggaaactc cccagctgtg 180
gccatgggac agaggagttc tcaatgcctc cttctagaa ctagtactaa tatggaagtg 240
gcataaacag ataacacaac agacataaaa tataaacaac 280

<210> 200

<211> 205

<212> DNA

<213> Homo sapiens

<400> 200

gtcttgttgc agtgagaatg taaagtacgt gagctatgtg ctttgtgatg aagtcgttga 60
tttatttcac ttggaacaa gencaccaca acaaagttag aatgagaagg tnattcagag 120
ggagaagaag gaaacggaac tgnctgtaga aatatatcct catatgaact tanacnctgn 180
aatanatnta ggttgcaaaa acacc 205

<210> 201

<211> 261

<212> DNA

<213> Homo sapiens

<400> 201

tggaatatg aaaccagct cccttgctga agatgggaca acaccaaggc tgaactcaca 60
cttgaattca cccacaggat ggggctgagc ctgagatctc atccttcattg gcttcctctc 120
cttccttctg tticagagga atctgacctc actcacttgt tttaggttac aaacaaaata 180
aatggtgagg tcaggacctc ggattgctgt attgagcaaa taaaaataca ggactcttgc 240
attttatcta gcaataaaaa t 261

<210> 202

<211> 124

<212> DNA

<213> Homo sapiens

<400> 202

```
cagctcagcg tgctgatgca acacaggtga agagcacctt cccctcccc acctgngggc 60
tgattnccac cacgtggatc ccaaggccat cccaggaact ctttggaggg gagaagccca 120
gtgg                                     124
```

<210> 203

<211> 265

<212> DNA

<213> Homo sapiens

<400> 203

```
atgaagaaca aggccataga aagaaagcca cgagctcaaa ctgaagatgg ggcgggaatt 60
aggattcaaa tccaggtctc cggatcccca agacagcgtc tttccacaa ggccactgca 120
gccatccatc aatttagaca tgaacctgtt acctatgtgg tcacaatcat gccatataca 180
aactttagcc aagtagcact ttttctct tagtgcttct tcaactcagaa tcaaattaat 240
tcctcaataa agttataaat ccaac                                     265
```

<210> 204

<211> 465

<212> DNA

<213> Homo sapiens

<400> 204

```
ccttccttga agcagcatga cccatctgga tgcctcctc atctcaggaa ttttctaata 60
agctgtctaa atccagagat cgcaccacag aacaatgaat gccaaagatg agttctaaag 120
atgcgagtac ttttttcta aacggacgct gctttgtgta tggctctgct cctgggggca 180
gacgcggcag gctaagccct gcggaggagg agcaggagac agggaccagc agaagtgaag 240
aggcgttgcc ttaggntgca cagcagatga cgctctcaa gatggaccct aggtgtgtct 300
actccgtctc acagcttgc cccattatc atgaagatga acgctggtaa cactgctacc 360
tacgagctga gcttgccgcc attcctgggg nggacatgca tgcgtgccgc ctcacgcaat 420
gtgctnagtg cacaggaagg gagaccaaen ccccttgagg gggtt                                     465
```

<210> 205

<211> 181

<212> DNA

<213> Homo sapiens

<400> 205

```
agtgtctcc ctggttattc cagaaacacc agtcgctgag gatctctcac ctgcagttcc 60
ctgtggatc ttattctga ctggtcaacc aattgttcca gtgcattgaa gggttagcat 120
ttcatcatcg aattgctttg tacctatgtt gaaaataaaa tggatgatgt tatgtggctg 180
t                                     181
```

<210> 206

<211> 388
<212> DNA
<213> Homo sapiens

<400> 206

```
gcaaacaagc tgagagtta agtgatttac ccttcctgaa agaggagggtc atgaacagaa   60
ttccaggatt tggacctgta caaatgccat taaggcaatt ttcagggac ttaacaaata   120
cccacctggt gatgttaaac tacctttgaa gaaagcagct gttggcccaa attgtggcct   180
acaaagaacc ccttggtatt taaggataag aaagatttgt atgaggtgga ctgactctc   240
tcccaggagg cagccatag gaaggcatgt ggcccagtga caacaataac tgacatttac   300
tgagcgttga caatgaatgc gcgtaagact tacataatct cattatctct ccaatactta   360
ggtgcatgtc taattatcac cattttgc                                     388
```

<210> 207
<211> 418
<212> DNA
<213> Homo sapiens

<400> 207

```
ttagaaatgc ccgntactta agagtancct gccnnancta caaagctgng ngnttnnaac   60
tnanngtgat ggccattgat ggittnnntc tectgancnc aggatntgcc tgcctcagcc   120
tnncnnagtg ctgggattac aggcattgagc caccgcaccc agccaaggat tatttaagga   180
tggactcaa atccagtac aagtttcctc agaagagtga aagatgtgaa gatagaggca   240
gaaattagac taatgaatct ccaaaccaaa atataccaag gactgccagc agctagtga   300
gaaacatgga acagattctc cticagagct tccagaaaca atgaacacta ccaatacctt   360
gatttgagac ttagtcttcc agaattatga aagaataaaa ttactgctgt tctaaacc   418
```

<210> 208
<211> 450
<212> DNA
<213> Homo sapiens

<400> 208

```
gaagaactcc ccttggaag aaccatcagt gccggaagat ttctattgt gttgatccat   60
ggcaaaggag actgcagata cacaagggat attatggagc ccagacgacc tgaataaaac   120
ccttccttac tacaaggaca gctgtccctt ccctacacac tccctacagg ctgatgagag   180
acctttttg gaagcagaaa cttatacttt atgctgcctt ctcctgact gccaggatta   240
tactcttct ttccatcca gatctagcaa tgctgttgat gaggctaagt catgatgatt   300
tctttaatat ctggaacac agtagatgcc tgatatttgc tgatggactg gagaaaaact   360
gaaagtataa accacaacat ctcaagagat gtcataatg gagaagcata tggtaaaata   420
taatgaaat taaatctact ttacaagtgg                                     450
```

<210> 209
<211> 390
<212> DNA
<213> Homo sapiens

<400> 209

```
ctgaggaaac tgagacttgg agacttatgt gcaattaccc tcaagcaagt ggtgaactgg    60
attcagtcca tgcagatgtc tgggggtggga tactgagatg ctgcgttgct catgagctcc   120
caggtgatga gaagggggcct ggtccatgga ctacacgtgg agcagcagag atgtatcgac   180
ttgtccattg aagagacaca gaccaggaaa ttgatctgct gccaccccag aactgtgtca   240
tttatttatt ctgcccatac gtattgggtg ttctcctgt cccaggcatt gtattgagat   300
acagtagaag actagaagac gagacaggcc tgctccctga cctggtggac tttagaccta   360
aagcaaataa attagactct tacaaagtgc                                390
```

<210> 210

<211> 253

<212> DNA

<213> Homo sapiens

<400> 210

```
gctctgggtg agtgttcag aagctgacga tgatgcagga tegtctcct cacacacaca    60
aatgccatgg caacagcaac tccgtgacaa cagcaaagaa agccagactg gaatttgcca   120
accagagtg tcgaccatct gtgaggccaa accctccaaa tgttgcccgt tctaagtgt    180
catctcaacc aggcttttgt acatagcaga ggcgacattt aagtacata agaataaaca   240
ttgggcacat gtc                                253
```

<210> 211

<211> 247

<212> DNA

<213> Homo sapiens

<400> 211

```
gaatgttctc ctgtttgttc agccagatct gggcttagtc tttgctttt ctacacggat    60
tctaaaatca gcttgagcaa gtccatgaag aagcttcctg gagatgctga caggaattac   120
tctggatttg tggaactgga tagagatggc atctctacag cattgagtct gtgcaccaac   180
ggacatggca ttctctcct ttgattcaga acttcttate ttcaataaaa atttcagaat   240
tttctcc                                247
```

<210> 212

<211> 173

<212> DNA

<213> Homo sapiens

<400> 212

```
attcccaggt gaagctcatg ctgctgtctt gcagaacaga ttgagtcgt aatgctctag    60
aacagagggt ctagagtacg aggaatgtac ctctcagct ccaacacaga cctactggtt   120
cagaaactct gtggatggga tccagcaatc cattccttat tgagacctcc agg          173
```

<210> 213

<211> 382

<212> DNA

<213> Homo sapiens

<400> 213

gatggggagt atgttcccca aagctgcctt ctcaaggagt tggcgcttt tggggagtct 60
tggatgcccc attcgaagac tgtggtgggt gaatcaggcg gtacccttc gccaagagcc 120
tggggaaatg ggccaggcca gggaggacgg aagaatggct ccatctcaga atgcaagtgc 180
atcctctgcc cgctccagct cctccatgtg ccctgccag atcctggcac ttctactgg 240
agaggactcg gcccctgcc agggatcatgc agttatgaag gatgaggcta gaacccttg 300
cacccatctt ttcaaatta cttcagccaa agtaagcttg gtgaataagt tgcaattaa 360
ataaaggatga acaagcctgg tg 382

<210> 214

<211> 220

<212> DNA

<213> Homo sapiens

<400> 214

gactcaggt tattgtgtt tatttgggg accctgctt tttgcttga aaccaagcaa 60
ccagactctt cactaaacca acaccaacag atgaagttag aaggcttgaa gctcttctc 120
agccccaggc cttctctt cttctttt ttccccccag catttggga atgtaaagt 180
gaccagatga accaaaataa attgtttac ctggcttct 220

<210> 215

<211> 146

<212> DNA

<213> Homo sapiens

<400> 215

gtcagcatca caagacgcat gaaagaggac tcacgccag ggcattggagc tgggttttg 60
atcaaaatgg aattgtctt caaatagaca gtattcact aatctcctt ctttaaata 120
agtaaataaa acaaacacaa aatctc 146

<210> 216

<211> 268

<212> DNA

<213> Homo sapiens

<400> 216

ctatctgctg cacacgaagg tatacatcaa ttgaaccgcc aacaccctac cccaagaaga 60
gtacctggtg gaagatccaa cagtatctgg gagtaatgga gtttctcgc atggagtca 120
gaagatgaca ttgtttaaa gaagaagagt aaagcaagat aattatcagg gtagaagtgg 180
agttgctact acatggccaa gaaaagtgtg aatgtgctgc agtgattggt tgatccaag 240
ggcaacacac tcagccagac tgaaaaaa 268

<210> 217

<211> 381

<212> DNA

<213> Homo sapiens

<400> 217

```
ctcacaattg gatatactgg ttattttacc aaggctttaa ctggaatgat atatttttgg    60
atatgaccag actgctttga gcaatttagg ttgtcttcac agagcaaata aaaagcccct    120
tggaaagact ggcttggtgc ctcatctaca tggctccctt acgaggttcc tgatgatctt    180
gtgggtagtt caatacactg aatggttgta taagtgggaa aagtggcatc ccccttgctc    240
agtttctata agactacat tgaataaagg cctcaatcaa ccatccatac ctactgcaga    300
ttcttctaga tgctgatgta tgcggaaccc agaatttcta ttcttggcac ccatataagt    360
aaattttatt tgttctgcat t                                     381
```

<210> 218

<211> 298

<212> DNA

<213> Homo sapiens

<400> 218

```
ggagcccaga gggagccatc caatgccctt catgaagtca cgcatagtca gccttgctact    60
gattctgcaa aagaggaaaa attaaattat gagaagaaac tggaacttcc caagaatcct    120
aagtgtgtgt ttaacattct gtaacttcca ttctattgt aaattttctg taacttttcc    180
acttcaatat ttgcttgaat attggtattt aaccaatagc atgttgaact tcaaccattt    240
cttccttaaa cttttatcct ttttatattt ccttgcatga taaattaaaa ataagcag     298
```

<210> 219

<211> 128

<212> DNA

<213> Homo sapiens

<400> 219

```
ccatcctcca ataaattcaa gtttttattt tggaatgact ttccatttaa agaatttcga    60
ggatactaca aagagttcca gtatatcctt cattcatctc tccctaatgg gagagaagga    120
ttattttg                                     128
```

<210> 220

<211> 270

<212> DNA

<213> Homo sapiens

<400> 220

```
gggttacata attagcagaa gggaggagct tcaaatcctg gcactctaac acagagattg    60
ttactttaag actacacagt accacttatg aaaaaaaact ggcagaaggt gttggtggac    120
aagaacctct cctcttcatt gaagtgaaca gaccccgcca cgtggccatg agaccataga    180
gtacgagatg gaaaagagcc acataccact gtgcaagtgg tagtttgaac tctgtatgc    240
gtggcttata tacacacact actgagattt                                     270
```

<210> 221

<211> 461

<212> DNA

<213> Homo sapiens

<400> 221

gagctgagct gggttttaca gaggaccgc gaggatttct gttgtgggaa aatacccagg 60
aagtgactga gcccagccag acgtcactgg agacatgcag aagaaaaggc aagattgggt 120
gtgactctcc tcttctggga acattctaga aaggggtagc aaggatgctg aaaccaggcc 180
agctccataa gacctcatt tgcagaaata gagagaagta aggggtgtag gtaggaagaa 240
cagagtggta ctgagaagtc tcaaggaaga gagcgaaggg gaagagcagc atagaaagtg 300
tggctgcatt tgcgtgggtg tcttactgcg tacaatgggt gagctccatg gtccttgta 360
gcctccctca cagggggaat gccgcagatc tcttgaaaaa aaatagcttc ctntttagcc 420
tgncccgaat tccccactat tncacaaca gggagaatgc c 461

<210> 222

<211> 755

<212> DNA

<213> Homo sapiens

<400> 222

attcattcct ctgaggaccc tcaagtactt cagaagaact aaaaaatgaa tatcacgtta 60
caccaaagaa gaaatgaaag ctgccagtgt ctctgaagt taaacaggct cctgttcttt 120
gaccagcaa tccaatccta gtgcatgtt tgtggacatc cccccactgc ccttcactct 180
cagaaaggaa cagcctcctg tgggttgact tggatgatac tgcctataga taatgtctcc 240
aaccacagge tcatcactca gacatctgcc ctgaggagga caggttcac cccagcacca 300
gagacatgtc tgccaaggct ttggaactg atttatccc catgcaaaaa gctagattct 360
aattctgtct gatcacaata ggttgaaatc aagccctaca actgagggtc atgcacaaa 420
acaagaaata catggaaaag ttgccaagg attttagaat atcagaggct gtaaticatt 480
atagatgtgg atccttttgc ttctcttaa ggaaaaaaa tattcaattt tattaagaaa 540
aaattccac taactgngn catgttcaaa gcactccaga aaatattttg aacgccacan 600
ggtttcgtc aaggaagaaa atcatcatt ttaaggnggg ggggaaaagg agctggncat 660
tcattttc tcacctatc ctaacantta taagttaaaa angggangga ttggcttttg 720
nctaaactcc atggacaaaa caatttttg cttt 755

<210> 223

<211> 422

<212> DNA

<213> Homo sapiens

<400> 223

aaaaattgac agcaggggcc atgtctgttt ggttaaatgc tgtaacattc caagcacaca 60
gcaaatgtac ctacgtgat taattctcat gagtaagcag agatcttgac ctgtagcttc 120
ttacatctgc ctatttggtt agcagaacag agaattacgg taaaacagag gcatgtgata 180
agcgtttgtg ttgctttac aaacacgtct cccaacttag taaaaaaaa cactgcaaac 240
tcttaatttt agatcttctt angtttggtg taaatagaaa gtagagtata atgnittata 300
gatttatttc taaactatat tatgggtact ttctcgngc ttctcagata tttnagaaat 360
tgggtatgng ctggcatgaa tattggaatc ctttttntt taaanggtta aggaaaaaat 420
tt 422

<210> 224

<211> 207

<212> DNA

<213> Homo sapiens

<400> 224

```
agttctgaaat gattccacct ggtcttagca gaaagctggc ccggaagttg taatacatga    60
agatccaaca gccaccacgt gaccaagaga aaaaagccaa aagaatcaca gacctggcct    120
tcacattgta aaggttctta gccagggcca atagttgccg ctctctgaac ttcttatcgt    180
atgagaaaaa taatcattta ctgttgc                                     207
```

<210> 225

<211> 382

<212> DNA

<213> Homo sapiens

<400> 225

```
gtttttgcaa tcgcctgtgt gtttttctcat tcaagaaact tgagtaattg ttacaaacc    60
agaatgtcct ctgtactgag cagaagaacc ctgcagtcct tgaccagga aagcaacatg    120
tcaaataata agagcactgt ctcgagaatt agagagccag gccttggctt ccctctaacc    180
ctactggcca tgtgactttg ggcaagtcac ctttcttcc tgtgcctcag ctcatcttc    240
tgtataatga gaggactgga ctaagtgaat ctctctaac cgtgacttac acacaaacac    300
acacacacag acacacacag acacaaacca cncaccccaa cncncacca ccaccttaca    360
cactttgccc atggatcttt at                                     382
```

<210> 226

<211> 482

<212> DNA

<213> Homo sapiens

<400> 226

```
ccggacctct acattgctca atatggattt acacattgac attataggaa catttgaacc    60
atctgtaata ttagcatgtt ttagagaaaa agatggctca agacaacaaa ggctatacca    120
cctactacce tgggaatgaa tgcagcagga ggtacttagc tgaggcctcc attgtcctta    180
tggcatacat ctctggagga tggccagcc acgataaatt tgcaatacag taggtctgct    240
ctggctggag cacagcagac atttctctac agtctctggc tctctgatgc gagatacctg    300
gaacaaagac ctccctaate aaatcagcct ttgcctttcc gggtaaggcc cagcatgtca    360
atcctgctaa aaagcagaaa ggaatcctga agcagaangg ttgtaatatg atganggagg    420
aaccaaagga agaagtgagg aaaagccaaa taatnccttg ggccttggca cttgactcct    480
tt                                     482
```

<210> 227

<211> 408

<212> DNA

<213> Homo sapiens

<400> 227

```
cagttccagt gccttgctggg gaatgtcttc accagtgtct taaaaggcaa caggatttct    60
tgccctgtat ccagcagctt aaggcttttg ttcaaaaagg gaataagaga gaaaaatctc    120
```

tectatcatg cttttcttgc ggtactgtg cctgtttta actttttgta taaatggaat 180
cattcagtat gtacattttg tatctgtttt ctttactct acagtatgtt tgaaatgttt 240
ttatgttgc tttgtatag ttttcttcag atttctgaaa gtatgaccga caaataaaaa 300
ttctatata ttagggcata ccatgtgatg tatatattta catatatatg gaggcatagg 360
ggaatgatta ccaccatcca gcttaataaa natatccacc acctcccc 408

<210> 228

<211> 399

<212> DNA

<213> Homo sapiens

<400> 228

gtcaagtcac tgagggtgcag agacactgcc tttctgtcct aaagtccagt tcaggccagc 60
tctctccaga gtccaggct ttggtctcc gtctgcagat ctctttgct ttgaatgagt 120
ctgtccctga ggagggtcag gagcaacctt gagaaggaa atgatgttca ctaattcagc 180
cagaacactc tcaagggtcga ttctgagcga ggctgatgcc aggtgcagaa caaacacctc 240
ttgcgcctgg gagcttctg aagtttggag aatgtgtcag atatcacctg ttgcccctg 300
ggggcctaac cccaccctg tctgcattc gtgcanacta cactnggggc ttcggttggc 360
ctccggttg gncagcagga aacttntggc aaaagatca 399

<210> 229

<211> 283

<212> DNA

<213> Homo sapiens

<400> 229

tgaccgctgg aaagggaaca ccttgcaact tctccacga ggcttctgat cctaattgaa 60
ggagcagacc tctcccgta gaagtacatg gtggggaaaa agggccatgt ggacacatgg 120
aaacggattc gggcaggacc agaactattt ccttagccac acagatgaag ggttgtact 180
aattcctcag tgaggaggaa ctggaaccg atatcaaaat ccaatgtatg tctntatag 240
ttattgtat ataattatgt accataaact gtgcatggct tac 283

<210> 230

<211> 399

<212> DNA

<213> Homo sapiens

<400> 230

gcagtgttg tctgcaagct tcaagagcca gtgaccctga ctgccaagt atttccgaa 60
gggaattatg gttttgcatt tgatggttc caggaactgc taagagtgc atcatccctg 120
aagcagtgc tgccagagga aggcgagaga catatggtgg cttacagga gaagaacatg 180
tctnagagag ctctactcc tccagtttg gccccagaat gaaacacagg aagaagacct 240
gaatttgatt tgcatttcaa agtanaactg tcccagctga catgaagact gatnaataag 300
gaataagat tttatgntgn atgtcactga tttttctgn gggccaatat tntgtanaaa 360
aacctgncct tgggccnctt accattaaac ctggaagaa 399

<210> 231

<211> 60
 <212> DNA
 <213> Homo sapiens

<400> 231
 gtggatgaag ttgggtgctt cctgtacatt gattttgctt cttcttggtt caccaagaaa 60

<210> 232
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 232
 gcagcgacct tcggcattaa attactcccc agaactcccc agcaaagcaa caaaaccatc 60
 aaatatggct gagccgataa tgcgccattg tggccagcc tgggcaataa gagcgaaact 120
 ccgtctcaaa taaataaata aataaatagg aacagtgatc actaattaca aaattgaata 180
 tcgaacccaa aaggcatatg tgtccaccgg aagaatcttt ctgaatatat caggtttgat 240
 tccatgtaat cccacaccag cccaactacc cacatccaga cccacatcca gaacgttata 300
 atctgataag tgcgacaaaa c 321

<210> 233
 <211> 240
 <212> DNA
 <213> Homo sapiens

<400> 233
 aagcacctga gactgcagag agtgccatgc aacaggaaga tcagtcaacc acagagcacc 60
 aactatcact tgcccggaaa acatctaccc tcaacactgc ccagggaaca tctacettct 120
 tctggtaac catttacaat ctctccaac ctccaacctc catacctctt cttaccccc 180
 ttcttcaat atagcctcac ccttgtatg tcatgaagga aataaacccc cttatacaag 240

<210> 234
 <211> 600
 <212> DNA
 <213> Homo sapiens

<400> 234
 gcagcacctt acaagaaaag ccagaaaaga aaacccgtgt gtattgtaag agtttaaaga 60
 gacagccact ccaaaagaaa atggacattc acattgacgc ctggaaaaga accaggagtc 120
 accatgcaaa tgtgtcatag cagcgagaag tctgtgaaa gcgaaggaga tcagccaggc 180
 tcccgtgagt cagggttcag gattcagatc ttatcttcc taagacactg atctcactgg 240
 tccagttat tctgaaacg ctgtccctcc tccgtttcc ctgaaattta tcaattaaag 300
 taccgntct tgtgtaaggt aaaaagatta agaagttga tgagacagag ttacaacag 360
 ctaaaaaaga agcttaatgg gatgggagtg gttcacagat ggtgcaaatt gtctgctaag 420
 tggcacttta tggatgggca gaatccatga gagttttatc ttgaatttct atcaggctgn 480
 attcagcana aactgggtcc ctggaaattg gcattttaaa aaaaatctct gncgggggnc 540
 tatctttcct gggtatacca atggcagntt cgacccattc nagctgggtt cttgaacaag 600

<210> 235
 <211> 202
 <212> DNA
 <213> Homo sapiens

<400> 235
 gggaaatttg gacacagaga cagacatgcg cacaggaaga atgtcacgtg aagatgaaag 60
 cagacatcag ggggatgctg gctgcttaca agccatggaa tgccgaagat agtgagccga 120
 caccaggagc taggagagaa gcctagaact gacgctccct cacggcctca aaggatccaa 180
 atctgctgac acctgatttg 202

<210> 236
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 236
 cacatgctta cccagaccct gatacgatcc tggaccaggc agaagcagcg tccttctcct 60
 ggaggagctt ggagcagcag caggaggcag gcattacacc ccgataagca tgcagagttc 120
 tgaagaggaa gctcgcagcc tcactcactc caggettttc ctctggacct gagctctgat 180
 acccactgca ttgtcagaac cagagcaaat ctggaggcca gagagcaaga ccagcaaagc 240
 caggatctct ggggtaatta ggccgcctt gccacacagg gtccacagg tggctctcagc 300
 tcccagcaat gaccaggga gaagcccacg ggaaccctca gctgcaacca atcctccaga 360
 ctgctggcct gcctgccttc ctgaaatagt ccagatttca cttattaaac atattaatct 420
 gaaagtt 427

<210> 237
 <211> 248
 <212> DNA
 <213> Homo sapiens

<400> 237
 gtcagagaga canggaacca ggaggccacg actggaaagt ccaggcagaa gagaactgtg 60
 gagccagccc agggaaggac agaagtggaa aagtcaccac agacaggaac aagcttcctg 120
 gcacacgact tncctgcaa acaactcaac ttagtcaaaa aggaaagaga ttgtctagt 180
 cctataccag gacaaggagg agattccaag gtgtccaaa cttactgat tgtgcccttg 240
 ttcagtta 248

<210> 238
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 238
 gtgtgaactt gtatccagg ctggccagtt aggatcttcc attccatccc caccaccatg 60
 actggttcag gaacaggga tgagattcga tctgaaacc cacattgaca ctactggga 120
 agataaattc cctcccccac caccattga agagactaat ctggagctgc cagtggccac 180

catgtggaaa aagcccacac aagaatgaca ccaacacaga gggagagcca gcctgagagg 240
gagggagaag aagaagaaga gacccgatgg catcttttca gctccgggac ccaggtgtac 300
tccaccact cgactttctg gatagaaaag ccaataaaca ccttctaag ctcatgccag 360
ttggactgtt tttaattaa aataatccta acacaccctt t 401

<210> 239
<211> 490
<212> DNA
<213> Homo sapiens

<400> 239
acggagtctc actatgttgc ccaggctggc ctgaactcc tgggtcaag cgattgatcc 60
acctctgcct cctgagtagc tgaaactaca ggtaatctgc atctattaa ttggaccata 120
agaccaagca gccagacctc agttttatcc gggtaaaaa tctggcagct cactggggac 180
agagctgccc tcagcagcta gaggcttctg acctgacggt cttaggaga ctcccagcag 240
ctgctagcta cagtttctcc tgaggacgct tctgagaact ttccctgggc aaaaggacca 300
cccatccctc tgctactggg gtagaanagg ggctaggaca ctgaaggggt gagtaaaact 360
ggatcataag cagggagctc attgcttctc taccaggggc ttgcaaagc cattcctttt 420
tggtancctc ttaaggagac aannnggct tntttgann ttttncctn gcatatngct 480
tggaaaaata 490

<210> 240
<211> 330
<212> DNA
<213> Homo sapiens

<400> 240
ggagcaagcc tgtcaaccan nagcatacga aaccggaggt ctgccttat cagcccttct 60
gcatgggaaa gctgcctcag caggctctg tctgtgaatg cctaactctt cccaattctg 120
aggtcagaac cagcancccc attggctaag agaactgaag ctatactc caacttagct 180
tatccggtta aaagataaaa ggatgatatt ttgantnctg taannaaaaan gncggaatag 240
gccttgaagg ctcnanttga nccgggncca aanagctnga anngggggan ctgnnagagn 300
ancacatga gacggggaaa gggggatgga 330

<210> 241
<211> 139
<212> DNA
<213> Homo sapiens

<400> 241
aattgaaagt gaagaccgat gaatcatgcc ttctgatcaa gacccatgtt ggagattgtt 60
gccctgacct tgggaaagtc tgtgtccatg taaattcaga tcttaatgaa acaaaaataa 120
atgtaaagca ttttctggg 139

<210> 242
<211> 457
<212> DNA

<213> Homo sapiens

<400> 242

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ctgaggccaa agccccctcc ccagagcaga cccctagcac tccacagcag gatcacaagc   60
tggctcttgg tcccagaccc tgcggatcct tgctgacgct tccagtctcg atcacttccc   120
gatggtttga atgtgaagtc aacaatccac ggaacaattt gcacttactg ttctagggc   180
tttgcagttt aaaagtgtct tcagtttccc cgatcttctt gcaggtgccc ctgcagtcag   240
aagctgagtc tgctccttct cccagcagca gctgggtaca ggatctaaca tcagtctctg   300
cctgtctggc agaagccaca gctgcaacgt gctttcaaga aaaatgggcc aggcccaaag   360
gagctccccg tcaagtgtct ttcagtgttc ccagcacaaa gataaaatta cacttcata   420
ggagtacaca aactaaaaat aaaatttaaa gaaagcg                               457
```

<210> 243

<211> 420

<212> DNA

<213> Homo sapiens

<400> 243

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gacgtctggt tgctcctgcn ttaagtcctt ctgagatcaa ctgtcacttt tcccactgc   60
tttgtgactc atgaagctgg ccttcacgga ctgcccacac cagcctctcc agctctctgg   120
ttccaggtta tctcttgga tacctggaaa tatacaatag gaaacaccat catgagatag   180
gaaaacagga gaagagagag atgaaganaa caggaaggaa acagattgag acctctggaa   240
acagatattg agacagagtt gcatgcagaa gatttattgc ggagcacgct tgggggatac   300
acctataagg aacttgatga angcaaatg gacacagaga gaggtctgact cgtgatacag   360
ctgcatccag gacatcagct gatcttatat ggagatagaa taaaccttca cagttgtctc   420
```

<210> 244

<211> 463

<212> DNA

<213> Homo sapiens

<400> 244

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gtgtctcttg actgggaagg agtgggaagag gtcctaggtg cagaagggta tggaagataa   60
ggtaaaggga tgtgctggtg ggaatgggag acaactgaga aggtgagaca agctggagga   120
aatgtcagga gctgctgaga gaagctcagc ctgaccagag atgagaattg ccatcttgaa   180
tcgtcaggaa gtgaaggaaa gccaggtga atgccacca atcaaaaaga aaaaacaaat   240
gcagatggta aggtagagaa ggctctgaag cccaggtaat gagagccatg ttaccctgga   300
cagaagcatc caacaccaca catctccaag gatgttgag atccagcatc tggatccagc   360
taactctgc atctcttct gtcttcaaaa agtaacattg gccgtccttg cnttgnntgg   420
acaacacccc ctaaaacgag tgnntttgta cgtttcaca cac                               463
```

<210> 245

<211> 317

<212> DNA

<213> Homo sapiens

<400> 245

tttcaggggt aatcttgtga caaaccaggc atggagagct agctgtgaaa ttccagagat 60
gatctcaagg taattagtct acagcccagc cactgctgag atgacaccag cacacgtcc 120
aggtggacca tgactcaaga cggccaccag aacaaggcat accgacctta cactcagcac 180
catgccccga tgcctccctc tccaagtcc tctttaagc ccctctcccc agcctaaagt 240
ttgaaatgtt tcttgtaagg aatgagcctg gccatttccc caaccgctgg cttttggaat 300
aaagtcactt tccttt 317

<210> 246
<211> 320
<212> DNA
<213> Homo sapiens

<400> 246
gctcctgtga tcagctgagt gctcgtaat tcccacgttc actaaacat catagttctg 60
ctgattctca gctttagagg gaaactctac agtgaacttt ttcaattagc agtcatcaat 120
tactggtcag aatacattat aattgtgaaa attatgctcc attaacttca ttaaattgtc 180
ctaaacctgt aacttgtcat agttcgatac ataggttggc tatatttaac ttccctgat 240
cttatttgcc atttttgca aaagcatcat ctaaaatgta gagagagttg tcagtaattt 300
tggttttta ataaacattg 320

<210> 247
<211> 218
<212> DNA
<213> Homo sapiens

<400> 247
gtctcacaga actctcttct cttcagaatc catcatcttc cctgactaag aattcactgt 60
atggagagca ctaggagttg taagagctcc aagcctaaca taagagacat tcatccagct 120
tttagatacc acaatctatt catctgtgcc tacttacagc caaatatcag aattacatgg 180
aaatgttagg ctacagaacca taaagactgt cagaagag 218

<210> 248
<211> 546
<212> DNA
<213> Homo sapiens

<400> 248
ataatgaaat aaagctcaaa gaggtcagt ttccaagatt acacaaccag aaatgacaga 60
agatgggtcc ctctgggatt cacgtcctc tgctgggagt ttacaccat tcgcatgtc 120
aacatgaagc aacagctggg ttgaagagag ccgataaaaa tagcagcatc gcactgcaag 180
caagccgcat agaaaagaag gggagtcacc gtacttaatg cagggtggca ttgatttctt 240
gtcttccag tccagtgtg tatttctcg accatctact tttcagaaa gagcaaagt 300
agctgcttgt ccatatgagg aaagagacgc taagagaaat tgaggaactt tgctgacctg 360
atgtaactag atgggactag aaaccttggc tcgcggaacca cagagttgac attacagcca 420
ttacatgag ttgcatttg tcactgaac ctctggatt tctatcatgt cacttgctgc 480
gtctcttgn atttgtgga attaaaatta aattggggag gttttattg acttctttc 540
tttgag 546

<210> 249
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 249
 agagacagag tcaagcatct gctagcgtcc ttggacaaga atgcatgtgt ggacacagag 60
 acaccagacg ccaatacctg gaggaaaact cacagcctct gaccagaagt gaactagcaa 120
 caatggtaca gttaaaggat cgccttgcc actcggtcc ttatacaaaa agccaaacct 180
 ctttgctaa agcagagact gttacatctc agcctcaagc tggcaaatcc tgctttggtat 240
 cccggcagag gaaattcagc cgttcattag ccttaacaag ctgctgtcac taagcgaaga 300
 aattacacga gcagnacac acccggggct tttaanagcc ntcccccaa gggcaagcgg 360
 gtttctccag gacggactgt acaagttcac acttctatg tgcaaatccg gactgtcttc 420
 ttgggct 427

<210> 250
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 250
 aacatgagct caggagggct gggatttggc ctgccttgtt ccctgcagta ctgccagaac 60
 tagcattgca cctggaacat ggaagggccc aggacacagt ggccgtggga caagagcatg 120
 aagccccaga gcctcaagca cagatgtacc tctcctgggg caggggggtt cactctgcc 180
 cacagcggga ggctacagcc tggccatctt ggggaaaccc aaagggaaca catggacaga 240
 tcagcatcca cntnnaaaag tgccaatgac ttcaagctgg aatccacca caggctggtc 300
 gncctggct ggccaggaaa aggctttatn accatgccac aaaagcttc aangggcttt 360
 ttgganttt naanccccct ggctaaggt ttgaaaagg cangggcccc ccaaagncc 420
 tttttttg gggggatttt ttaccctatc nnattttaaa ctcaanaaa aaatttttaa 480
 gcctncccn gggaattcat ctttaanna ttgggtcgg ttttttaac 530

<210> 251
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 251
 caccataaa attcaatgga ccaccatccg gacaaaagga taaaacaga acacatcaag 60
 ataatgaatt ttctcaaac tactgaggta caatgaaaaa tggaaatatt attcagaaa 120
 ttacaacaga gggatgaaga tatagcatat gctgtaccta aaagatacat caaatgggac 180
 attgggaata tggattgatg aaatttaatt tgcgattgnc ctataatgcc ttttcattac 240
 agtaccacac aaattgaggc aataaatgta tatttgatc 279

<210> 252
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 252

gatgagaacc tggtgttta aaaacatgga atcagtggag tcctgaatag cagcacatga 60
cttgcaacaa ctttcaacat ctcataaaat ggctgctcag cattcacttt ccatctcaga 120
gtcacttctt tggaactgct agggagtgcca ggggtacattt gagtcttgcc agctcatgtc 180
ctgctctgtg gcagctcttc cactgtctca taggagtgccc ataccactt ctcaaccatg 240
tccggctgag cattacaaat caccttctgt ttaaaataaa ataaaataaa aatctg 296

<210> 253

<211> 548

<212> DNA

<213> Homo sapiens

<400> 253

gatgaagaaa acgcagatca ctctaagaat gacaggttcc ctgggtgctg tgaagcatatc 60
ctaaacagat agctgcaaag aaggatcttt tctctatttc aagacatgaa cactgcccc 120
tccccactcc tgggtatttg taccctaaac aaaattgggt attgcctga tataacctga 180
aaaagggtgg gcttataact ttacatagtg atttatagtt tacaggctgc ttttacgatg 240
gtctcattta gtttccaaa atcaagctgn gatataagt ctattattcc cttttttaa 300
aaggggaaat gggggacatg tgaaggtaaa gtgagtgggt caagggtaca cgactagtca 360
gcagcagaac caggactaga attgcaagcc cagtgttctt ganggttgag cccaagaaa 420
ctctgtccag ggctttgcat catggggatt tggcccaccc nccntaagca nccgagggat 480
ggantgcaaa aacactggcc ttttctttt gtcccaancc tgcctnttgg gaagtcagg 540
accaaaaa 548

<210> 254

<211> 219

<212> DNA

<213> Homo sapiens

<400> 254

caggtaaaca accaccacag atgcaggaat ctgacagatt atgaatctgc tgctaatact 60
gctgacttca gtcccaggct actctgccat gatacagaaa tatgccaagt ctgctccagg 120
aagctgctga atcaggaatc cacctaccac attgggcagt cactgctagc tgccacctcg 180
gccttgatcc tcgccagcaa aatatatgcc tcaaacttg 219

<210> 255

<211> 374

<212> DNA

<213> Homo sapiens

<400> 255

atggggattt cggatgttgg aatcatgagg ctttgttta agagttgctt aagatgttct 60
tcagatcctg aattccagca gaacagctga catccacaac cagtttgagg atccccacag 120
aagagctgaa tcaacatgag aatgcagttt ctctatctct ccagtcctatg acttcacct 180
gcaatcccca cagaagagct gaatcaacat gagaatgcag ttcttcctc tcctcagtc 240
atgacttcac cctgcaatcc ccacacctca gccactcca aacccttac aaactctca 300
gggaggcaaa tctgaggttt ctttccatct cttgttcag atgccctatg attattaaac 360

cctttctctg ctgc

374

<210> 256

<211> 199

<212> DNA

<213> Homo sapiens

<400> 256

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gtcatgcgtt taaaaagaag agggcattct ctgcctgcct gctgcttga cagtgaact 60
gactgttggc catctcagac tgcaaatgag ggcaatacta tacgaggacc aaatgacaat 120
gaaggaatcg ggatccctgg atgacttcat ggaacaaagt catcgtatct ttcttggaat 180
gccagcttcc aatgggtgc                               199
```

<210> 257

<211> 463

<212> DNA

<213> Homo sapiens

<400> 257

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gaaggtcaag ttnnaagccc cgatggattt gatgcagccc ttgtgcttg nangatggga 60
gggggttcat gttgcaagga cgtgggtgat ctcccagcta acaccagcaa ggaaaccagg 120
actgcagtct cacaaccaa aagaattgaa ttctgccaac aacaagaatg agcttggaag 180
tggatttcc ccaaagtct ccagaggact ttgcccctg agcagcgaag ccagccatgc 240
tgtgcagaac ttccgaccta cagaactctg tgctaacaaa tgagtgtgtg tttaggctgc 300
taaagttgn ggnaggttgg tacacagcca ttcaaaaatt aatgtanagg ggggaaaaga 360
aacaggagga gctcanataa gcttctccca ccaccacaag ctgcatttaa agtggatagc 420
atcagcttca ggtagaaatn caaggaangt gtgtttgtc aac                               463
```

<210> 258

<211> 34

<212> DNA

<213> Homo sapiens

<400> 258

```
tgagccgaga ttgtgccact gcactccagc ctgg                               34
```

<210> 259

<211> 149

<212> DNA

<213> Homo sapiens

<400> 259

```
actaangaaa anctntatga ggatacanen agagggcagc caactacatt cctggaagac 60
anccctgaaa ccaacactga tggcacctag atcttaact ctggcatntg gaactgtgaa 120
aaaataaatt nccattgtt aagccatgc                               149
```

<210> 260

<211> 440
 <212> DNA
 <213> Homo sapiens

<400> 260

```

ggaggaaaaa aatgagcaga aactgctaac atctggaggc tgctgtccag ttacgtaat   60
ctcttgctgc agaggaggaa cacgggatcc ccagccagat ggtccgtggg tgacttcaca  120
gcacatgtgc tacctccaag acaggggtct ctgaggaaca aggaccttcc agagtgatgc  180
ttttccctag tggcagcctt ggccagggca acagacatct gcacaaacgc aggggtgtga  240
agcagctggt ctgagatgca gtgcctgaga atctgggata cacaatgtga acttcccaac  300
aaccctgca cctgccactt tcttgatct ttccactaag caccagaaga cacatgcntt  360
ttaaatacaa ggaatgtgag ttggaattc agcttctgcc attcactgac aacatggcct  420
tgaacccttc ataaactcta
                                     440
  
```

<210> 261
 <211> 253
 <212> DNA
 <213> Homo sapiens

<400> 261

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caganactga ggacctcact ctgtcaccca ggctggagtg cagtgggtgc aatcttggat   60
cactgccacc tctgcctcca ggctaaagtg atcttccac cttancctta caaggagca  120
gggantacag gaatctggca tcttcttta acttcaggg aaccatgggg ggaaactacc  180
catnggcttt ggtaaagcca ccaagtggc attcctttt aaataaaaaa ccttggttaa  240
aaccaaaacc ttt
                                     253
  
```

<210> 262
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 262

```

ggagtgggaag aaagcagaca agatggggat tgcccagctc tgtgaacgtg ttggatgggt   60
gcgtctatcc cgagtacaac agaacttgaa ctgaggcag tgtgatgtac tccagaatct  120
accttctgat ggtcatgggc tcaggatggg ccttggagga gatctgcaca ggaagcacia  180
agctctggtt accactggaa gccgtcttgc ccccataaac cagccttagg atgccactga  240
tgctgtatgg cagaatggag taacagagag aatttgcaga ataaagaagg gacaatgcag  300
tcaccaggtc agcataagg gaaggcttgg ctgcatcctc tgccactctg ctgctgctga  360
ctctgccagt ggggacagca catgttcct tctacgcttg cctgaggntc gtaactcaa  420
aaccacacia cnntttttg aaggagtaaa a
                                     451
  
```

<210> 263
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 263

atgaaaaaca gaagcaacaa tatgaatcaa ggcattctca ccattcccaa gcttggaggg 60
aaggatcctg tggcaggcaa atggaggaca tcaggagata aggcaaggtc cctgccatca 120
aggacctgac agccggctat gtgattctgg gcaagtcact aagcttgttt ttacaactgc 180
aaattgagat aataaaatta tctcccttgg 210

<210> 264
<211> 324
<212> DNA
<213> Homo sapiens

<400> 264
ggtgagacaa cgataagtaa gcaaccacga cacaggaaga gacttgtcgg ggagtggaag 60
tgctcccagg agcatcaact tcgcctgtgg gctgggaaag tgtgactgt cccagacaga 120
cagaccagga tctggtgatg tcccaggag ccaggcacga aggatcaaac agtgaaactt 180
aagagtttga gcggccttgc ctctggatc ttgtcttgc cttagaatt gtaattatag 240
gatgtgtgtg attttttcc cacttaacat gtcgtgaata tttccatgt ctatgtaac 300
ctttaaagc tatttacaat gatt 324

<210> 265
<211> 82
<212> DNA
<213> Homo sapiens

<400> 265
acgggagtct nactatgntg nccagcctgg ncccgaaccc ctgnccttag gantnttaa 60
angnaaatag cccaatcat tt 82

<210> 266
<211> 245
<212> DNA
<213> Homo sapiens

<400> 266
aaaacctggc ccatacagag cttacaccta tgacctggc ttcgtgggca ccatgatctc 60
agcaatgcat ctatcatgcc tgcctttgga cctaagagt atgaaccaca ttacatcaga 120
gaagagtgcc aggttcaaca attaataatt tagagttaca actacatgtg aacctatgta 180
cttgcathtt cagcaatatt gcagcatagt attattatc tctaaaataa aaaatgcatg 240
aatat 245

<210> 267
<211> 455
<212> DNA
<213> Homo sapiens

<400> 267
ntgctattgn ctnaatcgnn ggaaaatncn ngganngaag cgctagnnna ccttctcngn 60
ccnntnccaa caagcccggt cctnctctg ntgncatgan acctcgaggt ngcaaggaaa 120

tgctaaggga ttccgagggg catgctactt acctacatgg aattggcttc nnaattcact 180
 gggcaacnta ctgagactac cgtinnaggct atttaacatg cttcactatg aanngccaat 240
 tctttanagt nttatgacat tcatgaatga ngcggggggc ggncatgatg aatgcagagc 300
 aattccctgc gacagatact ttcagggaat ttatgcccc tccccaaga acaaaagggc 360
 tctgggctc agttatcatt tgnctgcga gagaaattac agtctttca gcaactnct 420
 ttaccctact caataaaaag cgcttattt tgaaa 455

<210> 268
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 268
 agtgaagaga ttctgactt cctgtcctt tcctgctat attacatata tctgctaaa 60
 ctctggaaaa cagtaccagt caaagtggg ctgaaacctt cctctaagac aaactaaaac 120
 gatgttaaaa aggttacacg accttactat ttcaagtact ggtataaac cactttctt 180
 gc 182

<210> 269
 <211> 502
 <212> DNA
 <213> Homo sapiens

<400> 269
 gcagactcaa cttcttagag ttccagcaca ttgagccctg ttgtctcat ccatctttc 60
 actgaccttc caaaggtgga ctggatggag aacccagct gtccattgtg ttgaaatcc 120
 ctttaagtag ggactcggct agaggtgttc ttctgcctga tcccagatg aaaaggacgg 180
 gaggggagtg acagaggagt cttcagccag ctgccatgc cccatgccgg accatggaac 240
 ctgacttcca gcgactgta gcagagaggt agctagagag cagaaagtag agattggct 300
 ctctaggga tcttgagag aactttgtta ttacagctt tgagatatct tcttctctt 360
 cataaggatg agaccaggg ttctctgata gggcactgcc ctttaaatg gactttggga 420
 ataattggc ccaactgggt ttttgaaaa agaataaagg ttgggggggtg ggaacctaaa 480
 gccctacccc ctgggggaat tg 502

<210> 270
 <211> 186
 <212> DNA
 <213> Homo sapiens

<400> 270
 aaaaatgagca acttgaaagc agaaactata atcactgtga atttcccat tgacctgcct 60
 tgctcttgc caattttat gaattttct atttccctca aaacctgtga aaaggactct 120
 tcacacagca gaattacaac gacttgctg ttcaatgaat aaatcagctc atctttatct 180
 tctaag 186

<210> 271
 <211> 386

<212> DNA

<213> Homo sapiens

<400> 271

```
gcattatcaa ctgatgtccc acaatggagg atgaagattt actttctctc tcatcaataa   60
aaatgtcggg taatttttgt gggtagcga tccagggtg aaaattaaag gcaatattcc   120
actgtattct ggtttccaat gtcggtgtga agaaatccaa agccactgat acagatataa   180
gaaaaagatt tgagtctttc tacatcaagc agaacatcct tggaatttct agcctggatt   240
tccaatgcca acagaatgtt cagaaggcat tcaggccagt gaagttacca acacaacaaa   300
gatgaacgct ttcaaaaaaa gaattgcatt atttgctaatt aactgatact tagcagcaaa   360
ataaaaacca taaaataaag aggctg                                     386
```

<210> 272

<211> 482

<212> DNA

<213> Homo sapiens

<400> 272

```
atctataaac taagaataat ctggagaggt caattcctaa ttagaaccta gtatggaaga   60
ctaggatcct aaaactcagt ggtaactccg aagagtaaaa atctaccca gagctatacg   120
tgaaagattg gaattttaca gggaggtttg cattttaaaa ctggttgctg agatttcacc   180
agaactacca cagaaacata ccaggaaagc tgagagaatc cacagatcct tgaaggaag   240
tggttgcctg ttgcaggctc cttgagacag ccaaaaactg acctccagta caatttcag   300
gagaagtggc aagaatggac atccacctcc caccatgtga tgacatggaa ttttgccca   360
ggtacggtgg ttcaaaccta taatcccaac actttgggag gctgaggcag gaaaactgnt   420
tgagcccnan aagtttgaaa acagcctggg aaacatgcaa aacattaaaa ctgagatcc   480
aa                                     482
```

<210> 273

<211> 479

<212> DNA

<213> Homo sapiens

<400> 273

```
gccaatccta acccagatca aagatcctgg gacagctgga acaggcatgg cctaattggaa   60
ctcccaagtg gacagggcca agcatggacg gacagagctt ctgaaacagt cctcagacct   120
cgtgcatctg gatctttctg taggaaccac ccatcagcag tgccagacag aaccaagcac   180
atgcactgat ccaccgcacg atgggagctg gtgtgggtga gcttgtttgc ttagccatg   240
cccacagaca ggaacagaag agcacagtgg aggccaccag cctctcgcgc tgcatttca   300
aaaggggttg cagcaggggt ggaaagcggg tccactgtg gttgccccct tctctctgc   360
ggcacacaca gacctgaaaa taaccagaga gggactgtga gctgccagcc taaaacaagg   420
aagnttgcan aaagtctag gctcagatag gagagttaa aagaatgttg aaaccgaga   479
```

<210> 274

<211> 490

<212> DNA

<213> Homo sapiens

<400> 274

```
ccccggttc cactgaaggc tgcatttgag agatgcccaa ctgactgaga cgagaacaga   60
ggtgctaccc tggaacctgg ccacaaggaa gccctgatgt gttacagtg tgagcttgcc  120
cacaacttca aattcatcac catcatgctc taacatcgaa gtcctcacgt gcctcacata  180
aggaagcaca atttaaactg cataatagcc aatgatcatt aatgtttact gagctctttt  240
aaagcagaag gaactatggt aattgcttcc catgcactac aactagtta atcctcacag  300
ccaccacccc tcatgttaga tactattatc attcctattt catacacgaa gaagctgagc  360
ttcagaagtg gtttaagtaac ttgctagaga ccaaactgta aggagtaaaa ctgaagccta  420
tgggcctatg actcctaagt caagactcag agccactctg cttatgtctc tcataaata  480
tatttcattg                                     490
```

<210> 275

<211> 344

<212> DNA

<213> Homo sapiens

<400> 275

```
gacaagccac gccaaggcca aagctgaggc agcggaacag gccgccctgg ctgccaacca   60
ggagtccaac attgctcgca ctttgccag ggagctggct cgggacttct accagccagg  120
tccggaatat cagaagccca tggaagccca gggagatgtc cctggggcag acactaaggc  180
aggtgttgaa gacaagctgc ttgtcaagaa gcatttcccg gcaagagagg ggcaagtctg  240
gggtccaac tgggtacagc ctgggtgcag ttataagccc ctttggtta cttggtagaa  300
gatggctact tggatgtacc tacttaaag atgttttgta ccac                       344
```

<210> 276

<211> 29

<212> DNA

<213> Homo sapiens

<400> 276

```
ggctgancac agtgagtcac gcctgtaat                                     29
```

<210> 277

<211> 470

<212> DNA

<213> Homo sapiens

<400> 277

```
gagaaatacc atattatccc cattttgcag atgaggagac agaagtggag agaggtgaag   60
tgacttgctc aacatcacac agttgccttc ccacgtgtgt gagaccattg ctgtggaaag  120
aagccggggc tgacttcagg gatctggtgt gaaatgactg gacctatgcg ttctgagtaa  180
acaagagagc ccttctggc ttctccggga ggaaccaaatt ggcttcagca ttcagctcca  240
aagcccgatg gagaccaaga gtgatacact gtactcatga tcaactgctc agttctggtt  300
tgggcctctg agggctgatg gggtttgca gaacctccag cacaatgttg aatggaaatg  360
gtgatagtgg gcatcttgct ttgtaccag tctcactatg tggaagcttc actatttcac  420
aatgaaggcc cagaccggng actcaaacct gtaatcccag cacttttgga             470
```

<210> 278
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 278

```

atgtgttggc tggagctgaa gcagacatat tggacatgt ggtgacaacg agaattgagg 60
ccaccatggc aggacaaggt gctgcagtga ataccacaga caactatagt ttcaaaggtt 120
ttctaccagc aaaagacaag aatttttgaa gacactggga tataagaatc cagcaaaacc 180
tgttgcttgg gctttaatt ttacgtctgg tctccaatgg ccttgatcc aaccattggc 240
ttaggaagaa ttctgtgac ctgatgcaa atctaaagt ttgtgtacag gagcagccca 300
gatttggtgt gttcctctac acaaggaaca attgcctgga gacatgattc acaggagga 360
gggagtcct tcctagaaga gctatcataa aaagggtaca caagtagatg ctcaatcagt 420
gctgactgga atgaaaagaa ccaaagggat gaaaagaagg aatngaagnt ttgcaaaaga 480
tgaagctcta ntccttgcg acag
504

```

<210> 279
 <211> 509
 <212> DNA
 <213> Homo sapiens

<400> 279

```

gagccagtgt cctgggctaa acacaagagt gctgattccc actgtaagtt acagtgaaga 60
acttctgcta tctgagggca tgtgttttca tctcaaaaa aggatggaca gtcccatga 120
accttcctc tccaaccaca caggccttgc ttctggacat gcagtataa ctctctgttt 180
gctggatgaa gatcatgttg gctctatgca cattcagata accttctaca ccagacaccc 240
ctggtgattg ctctataaat catattggcc aggagaaagg atgttcagtt ccctaggctt 300
ttcatcatgg tcaattaggg aatcagccca aaaggctcagc atcactgccc ttaatgang 360
tcacactcca tgcactctga gtaccccgga aaagctgttg ngctgggtat taatgcatgt 420
gtccagaccc tgggtttcaa cgaaggcaaa tccctggcat acaatncaa cttggtctt 480
cttactgggg gggattcttc gagctgggc
509

```

<210> 280
 <211> 490
 <212> DNA
 <213> Homo sapiens

<400> 280

```

gtggcangta aataaggata agagatgata gtcaggcacg taggttgga ccaagctgca 60
cacaccgcac agtggagaga gacctgatcc tgcttagggc agagtggggg aaaggagcca 120
gggcctctc ctgctctgat cccaccagc tcatgacctt ggaccagccc ntgacctgc 180
aacctcgcag aactgaaaaa ctctatgntn tgnacgnacg atnangagng ancttgnaa 240
attggttctt aaacttgga gtcacacaga agactggaga cttcacatag accattgggc 300
ccttcgcca gagtttctga ttagcaggt ctgaggtagg acctgagaat ttgcatttt 360
tgttaangnn tcaaaaanga nctngannnn ttctntttt gggaanaaca ctttaaaaa 420
actactgttt caaaaacaaa aantttggtg gttttaaag gatgnggaac aaganaactt 480
ttccaaaag
490

```


<210> 281
<211> 520
<212> DNA
<213> Homo sapiens

<400> 281

```
gttcagccan ncantggccc tgngangaca ngnaagnen ccngnctcgn nctgggccct 60
aatgaaagga ctcaagngan gccaccctg ttacgcgcgt gagaacatgg ctggtgtgc 120
tcctctaact tggganagaa tagggctgtc tgntgtctnt accgcanagg gctnacatnc 180
nctttacggg atccgnntcn gaggannngg gccatttctc ttcccttctc tgttatgat 240
gcgatatgtt ccaaagccga tcacatcagc cgctgttatg gtgaacggaa ttactgtga 300
tggcggctgc accagcagag ccgctgtggc tcatgccac gttacgcgga gtctangac 360
gcctaccccc gctggctcgg gctccctctc actgggggtac acatttatcg ggatttatgc 420
ttaaaacaa gtagttcaca tttttttaa tgggggaaag tacaanaact ttccatttg 480
cggnngac ctancaatgg gcttaacttt tgtttttgt 520
```

<210> 282
<211> 386
<212> DNA
<213> Homo sapiens

<400> 282

```
gagcaggaag ctgcgtgta atccgcctg caaaagctgg aagagagggg cggaacgaaa 60
gaaccaatca tgagccagag acaaagaaca gagtaaccaa tccttgggtt gaaaatgaag 120
tgggatggaa cctgggccaa atagacactt gaaaaaacia atggaaaaaa aaggtgatg 180
taagtccac ctttagatc tcctatagga caggattgtg gagaatttgc tgcataatcg 240
ggacaacctc ttcaaggggc ggggcttagg gaaggggtgg ggtcttaaag tgggcgggac 300
ctagacgaag aaggcggagt ccaaatcatc actggtccac tgatccgaga tgcctaata 360
cccacttaag atgtaaagt tgggggt 386
```

<210> 283
<211> 489
<212> DNA
<213> Homo sapiens

<400> 283

```
caataactat ccaccttga caccttgtgg accatgaaaa cctcaaggat agagcaagg 60
ttattcatcg ctgtatcgt ggtatccagc tccatgcctg gccagatga gcagctgaga 120
ctcaagatat tgtttaact gcgcatgttt gcataggtag taacagtga gatgggtctg 180
gagcccagcg atctaattac tactcagaaa cacctgtgta tgcctgtgc tctcaattct 240
ccacctctc gtccaccac tgctgtcgt gctgtcgtc cgcctctc attacaacc 300
agctcagctt cctcatgggc ttgtattaa gcgctgcct gtcacacaa cttactacag 360
ctaaatgatg atgcaattc tccaggnttg catcaaccnc atgaaaaanc cncacctt 420
acttaanttt tttttttaa aaaaagaaaa aaacaggang gagcttgtg ctcaactgac 480
ctaagcttt 489
```

<210> 284

<211> 181
<212> DNA
<213> Homo sapiens

<400> 284

aatctttgag tccacgtgga ggaaggaagg agaagaggag aagactgttt tccaggatgg 60
aaagggagcc tcgctttctc ttaggtgga ttacagaaat tgggtgaatt ctccctgccc 120
tgagaaaaag tcaatttatt tttatgtta aagatttagg ctcttctga gggctactat 180
g 181

<210> 285
<211> 319
<212> DNA
<213> Homo sapiens

<400> 285

agaaaccaat cggacacatg gccgtggcag ttaattctat aggctcccca cctggataac 60
accaaagctc aatgcagccc caccacaaagc caataccttt tctccaacct gccccttctc 120
ccaggaaaagg gcagcctgtc ttctttgta ccccatcatc cacccaatta ccagagtag 180
aaaattcagt attatcccc tatctaagca gtgcgccagt ctggctgcat ctactttctc 240
aatctgttgc tttttgtcc tctgtagta tcttaaaaac ataaaggga aaagatataa 300
atgccaagca aaggacttg 319

<210> 286
<211> 230
<212> DNA
<213> Homo sapiens

<400> 286

cagaaaatgg ctctcaatt ttctatctca tgtggaggca acattctgc atcagattca 60
gcctgtgggc aaaggaatga ggcttctct acgatccttc aggctggccc ttctgaagt 120
agcaaagcat gtgtcattat aaaacatgat tgtaactcct ctttcagtgc cactgatttt 180
gtcgtgtggg aaatttttg caggttttg caataaagtg tctatcaagc 230

<210> 287
<211> 329
<212> DNA
<213> Homo sapiens

<400> 287

agggccacca cagatccggg catctgatc aacattcagt ggcaagcctg gaggggcaat 60
gcttgctcc cattgtatgg caggccagat atgttcttg cccatcagaa gcctccttct 120
ggatgcagtc tataagccac tgtatggat gagaagagcc caggatggag gtgaaagtct 180
ggaactggaa tctgagccct tattttctg actcactgtt ttaccttga agaactactg 240
aagttttctg catctctgtt tctcatatg tttaaaaaag aaagcactta accttggtgg 300
atgtgaaaaa taaatgaat aatttctag 329

<210> 288
 <211> 452
 <212> DNA
 <213> Homo sapiens

<400> 288

```

gaaatgcac ttatagcaga gagctggcta cctgccaaac caaacaatcc ctgagactgc   60
ggcagggctg ggaagcaagc tgagctgcca cgctgctaac ttgtcaaaca tacataccgg   120
ctttgcttaa caacaatgcg acacgtgcct gctagaagcc taaggaaacca acatcagaag   180
acagatgagc tataaatact tagaaagagt acaatccctc gatcaaccaa ccaccccaaa   240
ctttctcat cctgttcttg aagaagtgc tctttactgg gagcgtgaca cattcagacc   300
taaggagcca ctgagaaatg cagcaaataa agcatagaga gcacatttga ataaaaggac   360
cagagaacca ggaaggaaca tcaagacatg agatctacag aatcaaagag aaagccctca   420
cattatatca tgagattnca atggcagaag gc                               452
  
```

<210> 289
 <211> 476
 <212> DNA
 <213> Homo sapiens

<400> 289

```

gtgaatccca ttctcathtt tgcagtatcc aagagctgga tgcctacatg atgcagtcca   60
cagtggctga gcaccttctg tccctgggat ctgagactct gcctgccaca gagcagatga   120
ctggaaaacc ctcccactt gctgtcatca ttctgaaag gtcttcaggt gtgccagcaa   180
tttcagact gaatatctac accagaaaag cacataacta ccatgagcat aagacgtggg   240
agtgccatgg agtgaccata gaagtataga cagtaagatc acagccagat acaacttctt   300
gtttataga tgagagacct gagggccaga aagaggaagg cacttgccca tggtcacaca   360
gtgagtagt gagactggag cccaactctt caggggtctg ggctggggct tanccaaggc   420
tggttaggca atnggcttc ctgggggtct gggcaaatca tttttgcct actctg       476
  
```

<210> 290
 <211> 458
 <212> DNA
 <213> Homo sapiens

<400> 290

```

gtcctgctga ggatccctgg tgcccagtag ggaacaccgt gaggaggagg attaagaaag   60
gcacccttc cactgatttg catgccatt tgtacatgga gtttggttac agcaaatcc   120
gttgctatct caccagctac aagaagcaaa gaacgaattg caattcattt ttgtgctcta   180
ggacccgggt gaggtctcct tgctgacaaa aaaggaaatg acttctgaag acatgaaaaa   240
aaaaaacagg gngaanaaaa attgggttan aataacccat gacctaaatc attanacttt   300
gactaatgaa naactgcctt ttaacagagt taaaattgac agcaccatgg cctcacaccc   360
aacagggggt tgaggttgga ccctntttg acaaacgatg cccttgatta ccncaaaaat   420
accatcaca gcattattta taatattcct ggccaaag                               458
  
```

<210> 291
 <211> 471

<212> DNA
<213> Homo sapiens

<400> 291

```
gaatgcagct gtcaacagct attctaagta ttgtgactt gggtagaggag atttgtgtcc 60
atgtttgaaa atatgacatg acacgaagca aagagaattt caaaactcct gaccaaagct 120
ggtacagaga aaaactgact gctcaaagaa ctccatcaga tctttccagc aatctgtgca 180
tggagcgtgc acttgaaaag caagtgtgtt ttgagtgagc aggaggacag attcagccac 240
agagggcaag gagatcctcc tgttgccaca ttggaaggt gaaccattag ctgccttct 300
ggcagatgcc tactgggggt ctggagcttg gaggtgacac atggagcatg tctctctcca 360
cttttctct ntgtcagctt ccaagaaaac caganctgga aatcaaaagg ataccacaga 420
ggggcagtag ggccctccca natggctgan cagatgctgg caccatgcct t 471
```

<210> 292
<211> 349
<212> DNA
<213> Homo sapiens

<400> 292

```
aagcttcaag gactgaatcc tgacaggaaa caggcacctc caggattctc tccccagcag 60
aagattactt caagaccgga gtccctctg gactgactgc aagattgaat gtgattgatt 120
tgaacctgt caggtccaca atggtgccat ggaacaataa ttcaagataa gccatcagag 180
caagtcacac catttggcac ctctagccc ccttctctc ttgcattcca agcccctct 240
cttaaaccct tgccgtctct ccagaaattg gaaattggca attttggaa aggattccag 300
ccacttccc cctcgtctgc aacggataat aaaaatcact tttttttt 349
```

<210> 293
<211> 226
<212> DNA
<213> Homo sapiens

<400> 293

```
aaaaagaaca aatcacctgc tgcctcggca ggacaggatt tctgccnntn ccacctgtnn 60
gcagccgntc atggtctcca gacaaagtgg gggcccgagg cctgcagaac agtcggccac 120
attcaccagc ctgtctctcc tctggacctc ttggcacang ctttactct ccagactgtg 180
tgtgtttggt tgaattgaaa taaacacagc aggatttgt ttatt 226
```

<210> 294
<211> 217
<212> DNA
<213> Homo sapiens

<400> 294

```
gtaaatccaa gagtcaccaa atctttcagc ttttcagcta aagaaagaaa caagtgaagc 60
aatgggcaga aagtnttgnn ttctattacc nagagccgtc tcttccagc cnaaatgtaa 120
tttacatctg agtgtttggg ttcatctgtc acacgagtat tatacaccc caccattac 180
cctgaaaata aatatgagct cctcattcag gtaaattg 217
```

<210> 295
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 295
 ttggtgaccc tgaggcacag aaagctgagg gaatttgctc gaagtcacac agctgggtaa 60
 gaaagttagt ggttggtgtg tgccactggc ctacggcttt tgcagaga agacgggaat 120
 gggggtccag ttaccaacc ccttcagaac agatgggttc tcatgcccac ggaccttggt 180
 tacggagtgt gaacaggatt ctctaaata ttcaacttc ggaagaccgg attgaaagtc 240
 atctcaatta agcaaggact gagagtgtgc aaatattatt tgaacgttgg ttaacttttc 300
 cttaaatgga aatgaatgag cagtaaagtc actttgatga atcttataca gagcctctgt 360
 ccagagtcc tgaaactca cctgatggtc ataaaagaat caaaagt 407

<210> 296
 <211> 498
 <212> DNA
 <213> Homo sapiens

<400> 296
 tgggagaggg ctggaagtcc attccaacca cagaatacag tcccttcag gaaggaaagt 60
 aatttaacag caacagtcca ggaatcagac aagctacggc cccagaggca agcgttggag 120
 gggccttctg ctccacggag aactgactc cacgcagggt actgaccagg gcagggggacc 180
 agagatgaat caactccagc ccgggagctc accgtccagc aggggagata aggcagatgg 240
 aaaagtaact ataaaataag gcagacgggtg ataagagtta cacaggagat acagatagca 300
 ggcagtggga gttcagagca gagaggagtc tgggggatgg atgttagggg agattcagat 360
 gaagggggagc acttactggc ttctctccc aagaggtgcc ctaggatcca tccagaaaga 420
 tcttgaggag cccacagagt cccaacggga acttgtgctt ctggatgga ccccttacc 480
 atactttacc cactttaa 498

<210> 297
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 297
 actaagagtg ttcaaagaag aggaatcaca ctttggccag cagtatacct gcagccctgc 60
 ggctaaagt ttgtgaatga gaataaagt gggctctcat ttgaatata aggaaaatct 120
 gtaccagaaa tgccaaacaa ctgaattcaa aatgaatttc ttggaactca aactcaaaa 180
 tcagagatgg ttcagagaga aggtatctac tgctaatttc taactaaatg aaagggttc 240
 tgcttctgag agcaatgata cccggaacag gaacgaaatg ctgctagaga acagtgtggtg 300
 aagtgtgtcg acnaaactgg ctcttggtc tagtctatgc cactttcctt ggataatgga 360
 ggnccatgc tanggggaga aaagccaatc ananggttc agctgggnn gnnntaaang 420
 gaatacatca atgggaccgg g 441

<210> 298
 <211> 593

<212> DNA

<213> Homo sapiens

<400> 298

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gactctgggg actccttctt aaatcaaact gaaggacccc agcctttttt tcgccccgaa    60
agaattaang tcgggaatgc ctcccnana attngangga ngtnccgntn ccggggggnc    120
attttcttt gtgggggtca attggggcgg gtggttgga ataacaaccc aaaatcttgc    180
ggaatcttgt ggctttttn tcaaaatggg ccagaaggac gaacaagcac ttgtttcccc    240
aaggcatttt taaaaaaaaa gttccggagn aacaaaaact ggtcncagga gggatgaatg    300
naaattcact gtatcttaa ggggtggggg naagcctgat gccctnctg tattagagcc    360
cnccatgatt ctacagntn ggggggaaca acataatgcc catacatgaa nctggcttgg    420
gggctttcat ttttcccaa gaaaccaagg aaggggactt taagtcattn cccaaccaat    480
cgcttgggtt tcangttca tttcaanctt nnttttggg acccannnaa ttnttgataa    540
aannaanccc aagcttctt ntttggggg gatnaataa ttaattggc ctt          593
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<210> 299

<211> 537

<212> DNA

<213> Homo sapiens

<400> 299

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tgggggctcc tgctttatgc cgaactnggn tntngtttt tttnaannaa actngggcct    60
ngctttatg gtttattggg ccaaaaanan ctactgggg aacctttcc cnaccnccag    120
gttccccga ganctccac nattgaaaaa ggttctaggg ggcgcttaat taatgatgg    180
tgggatcctt taaggagaa aatcaaaggt cccccctag agggacattt gacttctcg    240
tggcagcagg gggggaattg gattgggagg taaagaaaga agctgtgagc ccagaaatga    300
attntggaa ccagcccaa gaangnggaa aggtgangga accagattct tagaagatga    360
cttangggga ataagccagg agcttaatcc acttctggng agactcttt ttaagaaaaa    420
aggngctcca aaattncn atcccaaatt taagtntga aaagccagg ntttggtt    480
ntaatgnngg gaggnaaata atttaaaaca tttccccct ttingaagggt taaccg    537
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<210> 300

<211> 270

<212> DNA

<213> Homo sapiens

<400> 300

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gagagaaaat aaaagctcag agaagttaag cgacttgctc gagaagctac aaagtggggc    60
agcctggact tgaacacaga cagtctgact ccaaagccct ccaaagatgt aggttaatt    120
taacctacat ctccagaaa atgagcaaca aaggatgtcc agccctccag caaactagtt    180
taagaaagaa actgtcttct tttctcttg tacttgaggt ggggtggggg cagggaataa    240
acaataatca tgcattgcga tgatttaac          270
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<210> 301

<211> 157

<212> DNA

<213> Homo sapiens

<400> 301

gacgtctggg gagctcctgc attaatcag aaactgagac atggagcctt gctatgttgc 60
ccagggctgg gtctttgaac tcctgggagt caaagtgnat ccttcctttt ttggccctcc 120
ccaaaagcac tggggattac aagatgtgaa gcccact 157

<210> 302

<211> 200

<212> DNA

<213> Homo sapiens

<400> 302

caagaaactg agaaatgcct acccgcagga aatggggntg ggctttttt agccntgctg 60
gantgtgaac aactggtgga atgggtgccct ggcaaccaac cangggaaaa gggcaaatgg 120
tttattattt aaagggtgga atttctttg gtggaaccaa aaaataaaaa ataccacaaa 180
tttaaccct ttctttttt 200

<210> 303

<211> 284

<212> DNA

<213> Homo sapiens

<400> 303

gatgatgaaa ctcccatggg gccagccaca gcagtaacca gactcagaaa tggacattct 60
tcacactgag ctgcatcaac ccaggagaga gaagaggaga ggcaacacgc catattttct 120
aatgagttaa agcctaattt aatctggaaa taactaatgt tgactagtgt gtttcccta 180
aaataattgc ctctgatggt caattttata gctaaaccta aaaaagatga ttaggaaac 240
actgagaagt tcacccctct tcccacaata aaaatatact ttgc 284

<210> 304

<211> 353

<212> DNA

<213> Homo sapiens

<400> 304

aggactgaga ggagaaaatg agacactgag tgggactcag ggattgctcc aggccacaca 60
gtcagcagga ggcaaagccc agattcaaat gcagattact cagctccaca atccacatcc 120
tcacaggagg ctgcactcct tgcccaagcg tcagacagga gcaaagagaa agaaggcaac 180
cagctggcta ctttctccc ttcttggatg cctccaacag ggtgagaagg actaaacaaa 240
tgaccaagtg tcatccatt ttggacatac ttaaaacacc ccatggaatt tttattctga 300
ctttctctg cctgtgtggc atttatgttt aaataaaaga gaattcaact cgt 353

<210> 305

<211> 423

<212> DNA

<213> Homo sapiens

<400> 305

atcctgcgng gtgtggctga acttcccacc cangganttg accagacttt gtcaacagcc 60
attcangaac tggcacaatg gactcacaga taagattcca ggggaagagg acatgtgtc 120
acnaacactt aggacttgaa atcctggctt gtggaggata gcatgacctc ttctcagatc 180
tgcaaaaatg ctgatgggca gattcaaaag agtcaacaat aacttcgctc tgacttggtg 240
aaaactgctt ttggaagaga ttctgtttgg gaaatttgtg ggcctgagtt accagtcac 300
tgttctgcc acaataactg tcatcattgc ttcgaagcaa tgtttggctt ggagcagtc 360
cgaatgagct gcctatcaca tgttgacct aaaataagaa gaataataa ctggcacaaa 420
ctg 423

<210> 306
<211> 431
<212> DNA
<213> Homo sapiens

<400> 306

ataaagaacc ctcttaggat ggtgaacaga aacactgaag ctgggatagc ccctgtcag 60
gggccatttg tcattccac aggccaagaa cctggacgt gtccccacat tggggaaccc 120
tccaatgcat aagccaaatg ggaactggaa acacttctt gtcccccaa cccagggt 180
ctcttgctt gtacacacg cctgccccag cagtgggaatt cagagtccgc gaacgaagca 240
gcaggaactg ggcggcagtc gctgtttcaa gattcaaaag caccagccca aacacaaaac 300
cagtgtgtac tccgtggaca gaaagtctg agcagcgccg gtctagatga attattaaat 360
tgnnnannat tctnncaagg ngtanccccc attggaaccc agttttatta ntccccgaaa 420
tatattaaat t 431

<210> 307
<211> 333
<212> DNA
<213> Homo sapiens

<400> 307

gaagaagcac cgtgggggac tctactgca aagaagaaca ggaccattat caacactcct 60
ccctctgtt ccccaaagtc cctcctgac cgcagcatca atcttcacg ctggcccggc 120
cggaggtggt gccactggca gatttaaatg agagcatgaa ggtgggacct ccattactgg 180
attagtgtcc ttataagaag aggaagagac cagagctcac tctccccacc acgtgaggat 240
acagtgagaa ggtggctgtc tgcaagccaa gagccctcac ccaaacagaa tctgctggtg 300
tcttgatgtt ggattttcta gcctccagga ctg 333

<210> 308
<211> 349
<212> DNA
<213> Homo sapiens

<400> 308

ctgggtttcc ctatccccgt gggcacgctg gtgtgccgtg tgttcttggc aatggaatgc 60
aagtagaagc atgtgccatt tctgagaagc cagataaaac atgttaggcg ggctcctca 120
tgctctctc tctcttctt tctggaatgg cgtggccaa aagaacctg gaaggcataa 180
actgaagaca gctttacca cgaattctt caagaagatg tgaaaaagat ccaccctca 240

acctgacact cccaacctgg actgttaccg tgaaangaga aataatcatg tatttngtt 300
gcttgagcnt ttaacccttt tngntaaaag gtaaattgct tgagacttt 349

<210> 309
<211> 157
<212> DNA
<213> Homo sapiens

<400> 309
gtgaagaaac taagaatcag aggagttcta actgagccat gaggactcga ttctgaaaa 60
ccttatttat aaaaaacagg aatgggaact aaaacaaggc aacctgtgca agcccttaca 120
agtttttcat gtattacagt aaaaggtaaa gcaactc 157

<210> 310
<211> 217
<212> DNA
<213> Homo sapiens

<400> 310
gaatgtgctt gccctccact tcctctctcc tcttctatg gggctggaaa tatgtggat 60
ttggagttag ccaggttcca caatgctgat gagtacaata ttccaggaga cagcagaaca 120
gcatgaagaa agaaacctgg atctgcaagt gccagcagt gagcagaccc caccaact 180
gggccactgc ttctggacca tcctaataaa gtaatgc 217

<210> 311
<211> 650
<212> DNA
<213> Homo sapiens

<400> 311
tgggccgtat ntaaaaagnc catgtenaca gcnnnnnngc nanccntnat ganaaaantg 60
gaaaantnag ggcctgntng gagcnaccn aaatntttct attctccgc anctgccnat 120
nactgnnggt agangnncgg gagcancatc ctatgaagaa aggaactagc tcactcggt 180
nnnggacnac natntttnat cctttaaccc tcaaggggna gtcattctcc tgactgctaa 240
ccttactttt gtaagctect tgaacacaga tcactaagaa ttctagagga gctattccca 300
gaagacatac aaagactgcn gatccaaatg actcaagagg tgaaatgtaa tgtatgctgt 360
ggtgtacttc tcagatgcct tcacctagg tctgaaatac tcattcccca acaatgcctc 420
catgctaaaa agtgttggt actaatgggt ctcaactgag ccctctctca agcattaccc 480
tggagaagcc canccaaagg gtaccttacc caaagancac acccgatatcc ctggagtcag 540
ctcacattca ntggactgnt caaagccna gcantaaanc ttgggggcag aaattaatgc 600
aagggaaga ccncttttga aaaggcccng attnctggg gaactggact 650

<210> 312
<211> 541
<212> DNA
<213> Homo sapiens

<400> 312

ctnaactgat ggacttggct agnccgctgc canccacatg gagtgggagg atcacggagc 60
ctgaagctga gaggccacag cactgcacct gacatatatt accaactgc catgcaact 120
catctcattg actccgcatt cccattttt ggagtggatc acctgcagtt cccttgacaa 180
ctgagtgtct gtattttct gtatcgtcca gtgtgatgac aactgtctac acaaccaagt 240
ctggccagca ctgaacacac tcagcttccc cacagtgtc caagtctca agcccaaact 300
gcagccaaat ctttggcagg ggttgnctc tggtcaggcc anaacacct tnttgaanga 360
cctttctgaa ctttttaaa ccattcgatg aatgacccta aattcttggc gcataattg 420
ggactgntgc catcacgcca gaaacattt taaacacatt actngtcag ngctcaagac 480
ctgccatct gnttnatntt gacaacagt atgcacaata nggggtgnca ttcccgtt 540
c 541

<210> 313

<211> 295

<212> DNA

<213> Homo sapiens

<400> 313

gcccttctg ctgtctact ctgatgatg aagctgcaac cctgtaagct gttctataga 60
aagaccaca tggcaagtac acaaggatgg ctttggccaa cagcctgtga ggaactgaat 120
cctgccaaata tccacgagta agcttagaaa cggaagttct aagctcccta ctctggcctg 180
gagatgatac tgaccaacac ctgaaatgca gccttgtgag ggaccccgaa ccagagaccc 240
agctaagcct tgctcatatt cctgacccat gagaacaatg agatgataaa tgttg 295

<210> 314

<211> 161

<212> DNA

<213> Homo sapiens

<400> 314

gttaagatct aagaacgttc taaatctctg ataggatttc ttcaagtta agaataaga 60
gtcaaaaagg aaaaaaaag aagcactttg ccaaagacaa acctgaacca gcaacagagg 120
aataacagta aaacatgcaa ttaaataata atcaaatagc c 161

<210> 315

<211> 277

<212> DNA

<213> Homo sapiens

<400> 315

gacgcaagct gacctggtgc aacgaagctc ccatccaacc aaaatgggcc agattgtggt 60
taatggacct taccaagatt tctacagac accacacat cgaggattatt gattggaagt 120
gtacgccact acattgact gaactgaag ttgtagactt tctcaaatgc ttcaagaggc 180
atttgatagc atcattgttt ataaacaggg aaaaactgga ggaaacctaa atgtctaaca 240
actggaaaat ggtaaataa attgtgttac agccatt 277

<210> 316

<211> 135
 <212> DNA
 <213> Homo sapiens

<400> 316
 gtacccagtg cacgtcctga tctccagctc tccagcggct tanaacagac acagaatggg 60
 ccgggaccag ggaccaccca gagacgtctg tagttaatag ctggcgctct tccactaata 120
 aagttttatt gaaat 135

<210> 317
 <211> 562
 <212> DNA
 <213> Homo sapiens

<400> 317
 taccacgaca acagcctaac cccaactaag gtaaactctg ccaccaaaaca tgcctgggaa 60
 tggagaaggg tctgcagatg agaaccctt ctggttctat gattcaaattc ttcattcact 120
 caaagcagga accaaatcca gtgctctcc attgttgga taaatgctct ttgcctgaat 180
 gctatttggt gtcttcgtag aatggagagt aactgaaggc cccaccggaa atcaatttta 240
 tgaagcttt tcattctctg gctcaagta ttctaaaat gtaccttct atgcaggcta 300
 cttattcagg caactattt canggggaaga tactcaaattg aaaatagaga atcccttttg 360
 gccttttget aatatttcat ttgtcaaac ttgatagtc tgacaaagtc ttaccatga 420
 gattggtaaa ctacggaag ccaactgtc tgggatgca ctcaactnc ctacttacga 480
 actncataat aatggcctaa cctgcctata cctcaantn ccatctataa agacaataaa 540
 agccctattt cctcaaaaaa ag 562

<210> 318
 <211> 362
 <212> DNA
 <213> Homo sapiens

<400> 318
 aaataacacg gaaagacagg cctgttctcc cggaactgac agtcggaggg gaaaaagaag 60
 gaaggatgct gtcgaatac aaaggaaggg gatcttacc aggctggatg ggagaataga 120
 acatatggtg ttccattct ctctccagtc ttcaacccc atcatgttc ctgccctgga 180
 gagttgcttt gactatcaga gaaggcatac tataatggct tagttggagc aaataaagag 240
 gcaggaataa gcctgtttgc tgaaaggagg tggaaaagcc gtgtgcagag ccattatcag 300
 aagtaccac tggaccaagg cctccgtgg nttccagcan aaaagtaacc ttgattatt 360
 gt 362

<210> 319
 <211> 410
 <212> DNA
 <213> Homo sapiens

<400> 319
 aaagatccag attacctgaa gctgtggtg gacactttg ttctagcta tgaacaattt 60

ttagacgttg actttgaaaa gctgcctacc agggtagatg atatgcctcc aggaatatct 120
 ctgcttcttg ataatatct gcaggttctg aggatccagc ttctacggtg ttttcagaaa 180
 atggcagatg ggtagagga acaacagcaa gccttgtaa tttgcttg caagttcttc 240
 attattctt gcagaaatct atcaaatgtg gaagaaattg ggacttgctc gtacattaat 300
 tatgncatca ccatgacaac gctctatatt cagcaattaa aaagcaaaaa aaaagaaaag 360
 gccagcgagg ccaattcagc tnggacttaa ccaggctgaa cttgctcaaa 410

<210> 320
 <211> 27
 <212> DNA
 <213> Homo sapiens

<400> 320
 tgtttttaaa gcaaaaaaga aaaaagg 27

<210> 321
 <211> 207
 <212> DNA
 <213> Homo sapiens

<400> 321
 agacctgtat tgccttaaca ctcccagcaa tgaccacctg caagcttgcg ctgcgactcc 60
 cgtccgaaga catgcgggcc agtatgagcg gagagggtcc cagcaccgtc acaagaccct 120
 gtgctattat ttagactca cctgtggctg ttgacaacac cacacacatg aatgatgct 180
 caccagaatc aaaatactca gctaaac 207

<210> 322
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 322
 taannngatg tacatggact gatcagactt nctgacctg ngacanatcc tgccagtaac 60
 atgagaggaa atgagaacga ggctttggag cacagcattg gattgctcat gcagaacacc 120
 acccagtgcc ctttccctct gtcacaatga acagccatgc tgcaggtgac ggctgctctg 180
 tcaacatgga tccggcaggg cagatgagtg gatccccag cggactcatg agagagcaaa 240
 caaaaagtcc atatgtgttg tgctaacca ctgagattgt gttggttgtt acggagccta 300
 acctagccta tcccgacacg aggatcagac atgataatca aatgtgttta taaagtgttg 360
 gatggaaata ttctgacaac attaaaagac tctaccaag 400

<210> 323
 <211> 197
 <212> DNA
 <213> Homo sapiens

<400> 323
 gaggcatgag gaggtgagag atggaaagaa tgctgtctgt catttggagt cagaaggaaa 60

agaaggttga gggctctgcc a gctctgctct agtggtttt tcctgtttca ccttttaca 120
aatcgagata atcgtttcta cttggttagcg atattgtgag gtgtaaaatg gattaataca 180
tgcaaaatgc ttaaage 197

<210> 324
<211> 360
<212> DNA
<213> Homo sapiens

<400> 324

gtgaatggac cctgagaggg cccagccatg tgatggaatg agccatgac cctgagtcct 60
cacctcaggg agagatgtgc agaagagcca cccaagtgtg gatgtgctgg taaacattta 120
gtgacccatt tgagggtgtg ggggagggtc taactggtaa catttgtaa ttctgtaat 180
gcatactcct actaaggctg cttttaggca accaacgtga tgcactgaa cacagtttg 240
aatggatgca cataatcagt tctcatgac caggatgaac cagccctagc ataccactgc 300
ccctaacca catatnactg ngcatcntn aaaaataaac atattggggt taagccttg 360

<210> 325
<211> 428
<212> DNA
<213> Homo sapiens

<400> 325

aataaacctg aagtctgtg cgcaccgaag acataaatga cataaatgtt gatggaagga 60
gaaggattg aggaaggacg agagtctgag gaacaagaaa ggactgcagt agtgaaacag 120
cggaagaaac gagatcattt ttctcttata aaaattctgt aaacacagcc attctttctg 180
tatttgtaat ttgaggaccg actggagtta ttctgagag ggctatgttc ctgagagaa 240
aaaattattg ttttgaaac tctagagaga actgctctgg caaaagaaat gtatctttc 300
atctacagcc attctgaggt gaaagatctc atgacactc tggactatac aaccacaag 360
cagacttcaa ggatacctac aggaacccca gtagtctga ttgatcacac aggcctaaa 420
gacctat 428

<210> 326
<211> 431
<212> DNA
<213> Homo sapiens

<400> 326

cagtctacta tgggttcata acaaatgagt cccacattt acatcaaact acctggcct 60
agtcctgtc ttcaggaaga agtacattta cactctacaa atcaacaaga aaaactetca 120
gaataggaag cctatgaaaa agctatcttt atttctcgtt gtgtaagagc ccatttctaa 180
tcttgacga ctcccgtttt accaagtga gtggcatgtg ctgtagtccc agctactgag 240
aaggctgaat caggaggatt gtttgaagcc agaagttcaa gtccaacctg ggcaatatag 300
tgagacacca tctcaaaaca agcaaacaaa aaagaatcat cacttgagtc ctttctcaac 360
ctcagaaagg gtcattatct cttcacctta caatgagaaa cctcaactac tggtaagct 420
taacagctaa c 431

<210> 327
 <211> 90
 <212> DNA
 <213> Homo sapiens

<400> 327
 ggttcagaa cgtataaaaa cacatgaaaa atgatacaca cagtactgg cacataggaa 60
 gtactccgta aatgttggct gatccaccac 90

<210> 328
 <211> 212
 <212> DNA
 <213> Homo sapiens

<400> 328
 agaactgagg actcagacct gggagaacac gccactgccc agacacgttc agcgacagat 60
 aaaacagtat aacattttgc aaaggcaaat tctcctctt ctgctgtaga aaaacttgg 120
 ttcttctca tacacactga gtccttctgc tcataatgct ggtcctaaac accttaatcc 180
 aaaagcagcc aataaaaaagt tttaaaaagt cc 212

<210> 329
 <211> 256
 <212> DNA
 <213> Homo sapiens

<400> 329
 gtgtcagaaa atgccacaga gcacagaaga caagaagagc tcctgtctgc atatattgca 60
 tcttccgttg ggcacagttt cactgatgtt atctgtaaac agaaagggtg agacgtgatg 120
 actcagccaa cctccaaat cctgagggtc atctatgtg cggaggcag aaagtgtcac 180
 tcccgttca ctccccgcag ctgtgtgtt tgggaattct gaagatttta ttttggatga 240
 gcaactttgg gagacg 256

<210> 330
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 330
 tgatggtcgc cccattgcgt atagaggaaa tggaggaaaa cttggaagta ccgccttcca 60
 taaaagtca aggatcgaga cttcctctc cgtgtccag aatccctcag gaaatacgcg 120
 catgccttcg catctagagc aagcgtgca agaattcaca gaacggccag aagttcccca 180
 tcccgttgtt ggcactcact gcgttaggcg ctacgcctcc agtccgggcc gcttggctt 240
 gaagacggcc gtttcttc ctgatacctg ctctagtct tctgcaact tctggattcc 300
 tgtcattctt atacctgctc tgggcagcct tccattcatt ctgcgaattc cctgaagctt 360
 ttcaataaat tgctttctc caattt 386

<210> 331

<211> 200
 <212> DNA
 <213> Homo sapiens

<400> 331

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catgcggaca ccacccaag ggagcaatca ggagaagcag gcgcgcaagg ccccggaagc   60
atatgccagc gtagaagacc ccaagtcaaa ggtcaaacag ggcacttgat cactcaagtc   120
ccccgctaga ccccttctg cgtgtacttt actttcgctt ctgctctaaa atgttgtaat   180
aaactttcac tctgctcgc                               200
```

<210> 332
 <211> 42
 <212> DNA
 <213> Homo sapiens

<400> 332

```
ttggctagag atttactaca tccgtccttg gaagaggaaa ag                               42
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<210> 333
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 333

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gtagatgggc cagacgagtc taagaggcag ctccgggcat ctctgagcat tgacttgcgg   60
acgttcccca gccctggagc tccatccagg ctgggaagag ggaggaccgt ggagattttc   120
atgagtgtcc cagcagttag aatggactct tgccgggcag acagacacag caaggctctc   180
ctgggtgctg ggggaaactg aagctgtcag tgcagctcc gaaagctctt tggagaggct   240
tccaagggtg ggatgcaccg tggaccaggc tccaagtatc gtcagaacta ctggaagatt   300
gttttcaaga taatctggaa caggaagaga agacacaaaa gcccagaat cagagcagct   360
ctttgcagga atttgattaa ggaaatgaga cagggtctga tgcagtggct cacgtctgca   420
acccaaccc ttcgggaggc tggagggtg                               448
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<210> 334
 <211> 246
 <212> DNA
 <213> Homo sapiens

<400> 334

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atccccgctg ttttctgcg tgatgctgat tgctggctct ggttcccagg aggcgcccac   60
gatcggatta actgccagct tctgatgca cagccttggt atcagcgcct atatccttgt   120
tcagcaaagt gcctctccac caactaatg tcttttcac caccctattt ctgcacgatg   180
tagtcacagt aagacacaga gtgtgcagtc ccgatcccag tgctacataa taaagatcca   240
gagctc                               246
```

<210> 335
 <211> 356

<212> DNA
<213> Homo sapiens

<400> 335

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gcctgccc at ggctgctcat ggaacaatcg gctagcgttt cctcccctct gagatccata   60
aaagccgg ca gctcagccag agcagggcag agggcagagg acagagagat gatgggatga  120
cccgtgcag agaggagcta cctcctgct gagagcttca gagacctgca gagacttcca  180
aatgatctgc ctgcagagat gagccacgct ttccagggtt ttctctctgc tgagagctga  240
gtacttgagg agagggcctg cctaggagcc gacctgacta cagagaggat ctgcccactg  300
tgggtctctt ctgttctaac actaaataaa gtcctctttt atcttcttca cccttc   356
```

<210> 336
<211> 225
<212> DNA
<213> Homo sapiens

<400> 336

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cctgctagca gagatgaata acgcgctgaa gaagcaagtc cctggagaga caggaagaga   60
tgagagagac cccaagtgtg tgtgatcacc tccagcacac tggagactga gccgtttcac  120
aagtggtcaa acctacattg cagcctgaag gatgtcttca ctctctctg ctctctcgcc  180
ttgtatcctt catagatttt tcccgcaata aaactttgca tatct   225
```

<210> 337
<211> 431
<212> DNA
<213> Homo sapiens

<400> 337

```
atctttaa at taactaagga tgaggaaaag ttgtgttca gttcaagatc acaatatatg   60
gagaccaa ag agctgggtgt aagtcagggt ttagccaaa ctgcatcagt ttctgccct  120
tggaacaaa tgaaagcaca gagacactca gagaaaagct gccatcagca atacatattt  180
caagcggaga gcaatggcta acctgcttct ttggggggcc caaaggaatg ctgccattgg  240
aaggcacttg acgagatgat atgtgtccca gcatcagtat catcattccc aggtgaaaga  300
cgggagagag ctgctctgtg tcacaacctt gttcttaatg ctactcaata aatttctatc  360
tggcttgagg gcaaagaact tgacacaatt tacttagaat ccnaactgga aataataaaa  420
atctttcata g   431
```

<210> 338
<211> 244
<212> DNA
<213> Homo sapiens

<400> 338

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gctggagtgc nanggcacaa tcttggctca ctgcnaccaa gagaagaggg ggaaagaang   60
ganaaggggn ggaaggaaga tggaagagca ggagctncaa aaaaactntc cgctttgcca  120
cctggaatgt ccaccagga taaaaagatc caagctcttc tganactgnc ttttgacctt  180
ctanaatgcn nagacaggac ggngattgtg ccctgaaa ga tcttcccaat aaagatctcc  240
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<210> 339
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 339
 gacccgcatt aagtcagag aaggcagcaa agctggtaaa gaaatactac aatccttctg 60
 gagaccagaa tctgacttc tggatgtgac aacaatctaa caggattctc tgatgcagac 120
 tagcaggagg tatgaacacc cctcccaagt ctctctctgc caatatgaaa agctgtcca 180
 caaatcttgc ccctatacgt agagggcgan tgaagagaac actgatctca attcaagaa 240
 gaaactaaag aacatctnca gatttttctt ctatctgaag agtcaaaact aattaaactg 300
 caataacttt ctaccttgnc ttcaaatctc ttacgttca aaacttccat taaccattt 360
 catataatct ccactacc 378

<210> 340
 <211> 239
 <212> DNA
 <213> Homo sapiens

<400> 340
 atggcgccca tcaatgttga ttcagaagtg aagccaaaac ataatttctt ggcactattc 60
 tggaggaaa ataagtgaga tagagtaaag atgactacat agccaattag aaaaagcaac 120
 taccactcc actccaaaaa agtcatgtaa ataacttcta gtctgtgact cgtcttcacc 180
 attctgtgca ctggctttaa aggagcggtt tacactcaaa ttaaatatc tctttgctc 239

<210> 341
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 341
 gcacatattc atgtatggc actttaacgc agtgctaccg tctgagacgt gtcggacaaa 60
 ggcttgggca gaggggctag aaaccatgta tcaccaaagc caacttctt cccagatttc 120
 agaattgctg gttcaactgc aaaagtagga aggcaatgag taatttctgc tctgctggac 180
 tagattacca ttaactacca tcatgacttc agaagatgct gtcacgatga aattcatttc 240
 tgctgcctaa ccccataata aggctggctg ttctctttaa gtaaaatgac taagctattg 300
 atcttttc 308

<210> 342
 <211> 439
 <212> DNA
 <213> Homo sapiens

<400> 342
 agaatcagaa aatcaggcaa tgcagagaaa ggaagagcac tacctccaca gagcagaagg 60

aaatccaggg aaaggctggt aggaaccagg agctgaagac agagctgtgc gccttcctgg 120
 ccacctcct taaatctgag atgggaatcc agccattgca ccagtacatg gatctgcaat 180
 tttttcttc ttcaaaggac caaacggtga atactttagg catnggggac cataaagttg 240
 ctgtcacaac tattcatctt tgtcactgta gcttaaaaac agccatacac aataggtgta 300
 catgccaaat gggcatggca gactaaaaag actaaaatga caaagcctct atgaactagg 360
 agaagaaagg cagtaaggga gattaaacng agctgaaaca aaaagggtga tgcataaaag 420
 aaagagttgg aaaaagatg 439

<210> 343
 <211> 463
 <212> DNA
 <213> Homo sapiens

<400> 343
 ctaannngat taggcataga ccnaaantga anactctgga tgtgggtggt ggctncttgt 60
 gaagaagaat tcaatcagat tccatttgat taatctgcat tgagatccta gtatgtgtcc 120
 gacactatgc agaaatactt cactccctct tccatggcag accacgatga actagggttt 180
 gctgttttca cggcttctgt cactgttggg gctgaggctg aggctgcagc aggagctcct 240
 ctggccccga ggcaagagac atgttctctg catccccagg ggacccaaag caacttctgg 300
 ttggggttaa agaggacttg ggtgaccca ccttgccagt catccacct ctggcagcca 360
 gggcggcagc aggggagggg gcagaaggct gccacagngc ttcttcccc tgcatttcc 420
 tctgcagctc cctctctggc cctgttttc agacctctaa taa 463

<210> 344
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 344
 gtcttatttt ttctactca tgagccaaga tgcagagagt atttctgcag tcagaggaga 60
 gatggtcctt acaaattttg caattggaag gatgaggcaa aatgaggcca aagatgaaaa 120
 aaccaaggcc tggataacta attcacagcc acacaagtat ttagtgcgaa aaaatggtaa 180
 tagcatgcag ctctctctgt tcagtgcctt ttcaggatg tgaagaaaga tatctgtata 240
 aatatgagaa gtccttccca aataagtaaa gtaactggca taactgagga gctctttggc 300
 aaatctactc tgtataccaa ctcaagaaaa acagggaaaa aacccaatc tg 352

<210> 345
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 345
 aggcaaaaaa caggacctag atctggaaat caaaagtgga agcagaaaat tgagcaatca 60
 gcctaccang tcnagtgggg caacagacta cgctcacgga ttctgtctac aacancggga 120
 ataacagacc annagaagaa ctgcagagca tccctctctc ccccgttcac ccgtgccag 180
 agcacgtgag tgcattcaca ggcagcacc agtctctgt tccactgact ccagcgtcca 240
 ctactgnga gcctactaag tggccacatg 270

<210> 346
 <211> 236
 <212> DNA
 <213> Homo sapiens

<400> 346
 atgggacat ctagtgcag gaaaagaagc tcaggggtcc tactgattct accttatgat 60
 ccttcccttg ctactggcaa gatgtatgca tattccggat cccaggtctg ttgtcccctc 120
 atgccatgtg gaagtttccc aagactatag agaaatgttt agatgtgcag atgccacaca 180
 ctaattctta gagtttctac ggccattatg actaaaggga ttttgtata ctgttt 236

<210> 347
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 347
 gtttggcttc ctgagacag aggatcttgc tcgcctcaaa gaggagggca gtttgccccc 60
 ttctcctga ctccaagaca aaagagagaa gactgaagag tgggatccag ggcctctcag 120
 agttcacctg agcttccca agtctgggtt gtctctcta cctgtctgt actactgcaa 180
 gtgacttca caagatgctt ctgagcatag cattgctctg ctgtgaccac tgcagatgtc 240
 aagagaattt ctgccttttg gaacttggac aatattggcc acctaccag agagaggaga 300
 aggataatcc agacataaag ggagcttcca cccatcctt ggatctcntg ataaagagtc 360
 atatactaa agagccatcc tcacattct gcccagactg tgagctgcat gagagaggcc 420
 atgtctcatt ttgtccatt tt 442

<210> 348
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 348
 gaaaggaaat aacccccgaa gccttgcga ctaaggacat gtatccttca gagaagtgtt 60
 tactgggcaa ctcttcctg ctgtaattga gtgtggccga ttgtcacaag agatgtttgc 120
 aaaatccctc ctgtccccta actcattct ccttgacgtg tcactctgcc aactctcct 180
 gtcggttggt gaagactgtt tctctcccc ctcaaatatg ggctgggctt gtaacttgct 240
 tgaccaatag aatgcagaga aatgaaatgc agccttcaac attcaaggct atgtcaagg 300
 agtctaacc tgtggatatg ctgttgtaa atgaggagc ttcgattagc ctgttgaaga 360
 cacacagacg acccgacagg caataccaac attcaagata tgcaagttat gctgtcttaa 420
 accatgctgc caagtgaact tt 443

<210> 349
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 349

agaactgagg tgtttctctc caggatcttg ctacttattg atgacaccgt atcaaggcgc 60
 cagagtccaa atggatcatca taagaaaaac tgcacctaac ttccacagcc tcctaggagg 120
 cccagagaca tcaactgtact tgccctgcat cctatgtggt gctgg 165

<210> 350
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 350
 gtgggggtctt tcaagccgag atcgcgccat tgcactccag cctgggcaac gagcgaaact 60
 ccgtctcaaa aacaaagaag ctgtcattcg gccccagatt tgtgctcga aaccaccacc 120
 gtgaggtcgt ttcccacagt ctccgagggt tgggggctga caatcctgca caggaaaact 180
 aggcgacatt cccaaatcat cccttgaca gccctaattc tacttttaga aggttcttgg 240
 taccatgaaa acgcaaatgc ccggtaaagg cagatttacc atgaagctaa taaagctcta 300
 acctcag 307

<210> 351
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 351
 gaatccgagt ttctgacta ctggaaccac gcctcccaga gaaatcaagg agacaccaga 60
 aaaacctct caagggacag ggaaaaatca cggacaagct ttcttcctt ctcacctccc 120
 cctaaaaaag cccagtgttt ttcttcctt ccagctatgc agctgcaccc agcagagaag 180
 tactagatta gcatcatctg catttcattc cttttcttt gcaatagcta ctgcctata 240
 ataaacagac ctgtgtctca agggagaatt tacttccccg tccagt 286

<210> 352
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 352
 aactctgcag ttggtgtcag aagtaatggt gatcttgtgg actgtttcgt aactttgaac 60
 agacaatgaa gaaagacact ggtaaaatc aataatactc tgcattctgc tggactaact 120
 gctaccacc aggctggtga tccataccaa gagactaatt caactggtcc tgtgaccct 180
 actcaggaag tgactcagca taactactg cacaagaca gtttgacac ctctatgatt 240
 tcacccctga cccaagcaat cagcagcacc cattccctag cccctgccca ccaaactatc 300
 ctttaaaaac cctcatctcc aaatttcaa ggagttggaa ttgagaaat atttctcaa 360
 tatctccat cctcctgtct cagccactct gcaattatta aactcttct ctgtac 417

<210> 353
 <211> 162
 <212> DNA
 <213> Homo sapiens

<400> 353

gacattgtta ccatttacct ccaactggata tctattttct ttcaaaaaga agctgagaaa 60
tcttaatgga aatatcaaatt ttctacatga tgcttccttg tctcttgagc tctaaaaaag 120
acaagaagaa aataaaaaga agtatctatt gttatttcac cg 162

<210> 354

<211> 235

<212> DNA

<213> Homo sapiens

<400> 354

acgangntgg aaaactgaaa gaaaacatat gtcaacgcat gtgtggaatg agactctcaa 60
ttcactctgc agctactgct ccagctaatt tagagcagtg atgacaggct tggctgggga 120
gacatggcca gcccttgga aatgcacatt ccctaacct actgtaaaat ggtggggttt 180
attaacaatg tatagtgcta acataaacca ttaaatgaag cccactcaat tctgc 235

<210> 355

<211> 227

<212> DNA

<213> Homo sapiens

<400> 355

gcaaagccct cctgttccca gcccgaagtc ggtaaaccce atgttaaate tatagggtga 60
agacctggat cattcgaagc ccagagcctt gcacagcagc gatctgtccc aacagagggt 120
gatgtcatca tccgaggcca cacaataat gcatttctca ccatcaaaaa gcctctgaag 180
ccatgttctc aaaggcaaaa aataaataaa taaataacca attaact 227

<210> 356

<211> 357

<212> DNA

<213> Homo sapiens

<400> 356

gatgtccgga agaggcaggt ancgtggaga cggagggtcg gcggggcaca agagaacttc 60
cagggccaca agcgactctg catgaagctg tgatggggac accgtgtcgt cgccggttg 120
tcggagctca cagaatgagc aacgctgcga atggctctcc tgcagccgg gacttagtt 180
ggcaacagtt tatcagtcct gcctatcaac tatacaaggt cctggccgat gcaagacgct 240
gagcgcaggg aaactgggag ggggggataa gggaaccttt gtagtctctg cacagttttt 300
ccgaaaaatct aaaagtgttc taaaataagt caattaataa aaccaaacaa gagcttg 357

<210> 357

<211> 369

<212> DNA

<213> Homo sapiens

<400> 357

gaacctgctg gaagctgttc tgaaccagag aaggatgaaa atagctgcca aagatgttgc 60

catagcaact gctttccttc ctgacctcct tggaagttag tagttgactt tgcagttgaa 120
gtacttttct gaaggcagaa gaggctgtca gccattttat actgacctaa ctttcttctc 180
ttgaaggatga actccctcat ttccagagt agtcaaggaa ttctgtgcc tctacccatg 240
gctttggtta ccaactcatc cctgggggcc ttggtttctt tctgtgaaat ggaatattca 300
ttccagcact caccaccttc taggctggag taaggctcca actttgcaaa tgctggttaag 360
taaactgta 369

<210> 358

<211> 170

<212> DNA

<213> Homo sapiens

<400> 358

gnggggtctt tctggcatgc gtctgnnaca ccagccactc cagaggcaga ggatgatgca 60
ggagaatnac ttgagcccaa ggcngtggag gctgcattga accgtgatca tactattgna 120
ctccagcctg gataactgag caagaccctg tctcaaaaca aaacaaaaca 170

<210> 359

<211> 430

<212> DNA

<213> Homo sapiens

<400> 359

tgctcttcaa aaggagtga aaatccaca gaagtcattt ggctggccaa ccaaaacaga 60
tgctgtgaac aaaaggcctc cctactggaa tccagaaaca tctgtgtttt tatggtcagg 120
tctatagatg ttgaagccag gtcccacgag ttgggtatgg ctgtcaccct gaagataccg 180
cagatcgcca acatcacatt cccagtcctc catctagtgg cctccagtgg cccatctact 240
gggccagcag gggccaggaa aggagaagag ggagaccagt ggggctgaag gcaactgtgc 300
gtctgtgcaa gaggaggaag ccctgtgaga gggcagcagc ctccggactg gtacaaagcg 360
attcttctgc ctcaacctn cgagtagctg ggattacagc aaaaaataaa attattgct 420
tatcttcaaa 430

<210> 360

<211> 194

<212> DNA

<213> Homo sapiens

<400> 360

gaggaccgga ggaagaacca agagaagaca agaactgaag ttcttcatt cccacctctg 60
catcaccttc cctgctttct ctttcccag aagagactca gtcaacatcc caaagaccaa 120
tgatttcatt gttttacacc aaatatccct cctctaaatt ttcaagaaa ttgggaataa 180
acttcttacg caag 194

<210> 361

<211> 454

<212> DNA

<213> Homo sapiens

<400> 361

atggaaaaag aatcgcaaat aagcataatg tgaagagcat gagctttgga ataagcaagc 60
ctggaattac aattttcttt tattagctct gtggctgtaa cactcaactt ttgcaagctt 120
cagtttcctc gtctgtgaaa tggaataata gcacttacct cattggctgt tgtatggatt 180
aatgagacc atgactatgg atgtatggca ttgtgtaccc aataaccct caataatcgg 240
cagctataat tattcataat aataatgggt gtagcaacaa acccagccca aacatctgaa 300
ggaccgatca ctaaaaagaa gatgaactca gtctacgta gtaacaagaa tgtganatct 360
atgttggtgc caaaagtctg gangagtgc caggaccaga aaaaaaggan ggggtgangn 420
ccgcttgaa naagganggg acagatgtca aggg 454

<210> 362

<211> 273

<212> DNA

<213> Homo sapiens

<400> 362

actcaatta gtctccgcaa tgcagtcaag cagatctcat gaagatataa atctcacagc 60
cttctctaaa acttctccca ctgatatctg ggatcctgag gcaagagtga cagaggcaac 120
tactcagaaa tcaggatcca tgatcaaagg agcaacagca gtgtcaacca agaattgttt 180
tttagcaaat ctctctacac actcccccta ttctccagcc atggcagttt ttaaccttc 240
cagaatacaa taaagcctct gtgattctg gct 273

<210> 363

<211> 387

<212> DNA

<213> Homo sapiens

<400> 363

gaaaactgct gcagagtgc agtcttctaa atggattaag aagcctatct caatccctct 60
ggagagtctt ctcaattca caatgaagat gttgaagagc agggacagac atcaacactc 120
ctctccccac ctccccact ggcagaggca ttcagggtcac tactagtgtc tcttttctc 180
tttccccctt ctcttaatct ctactgccc ttcttccat gtcatattct ctttttctc 240
ttccctctct tctttcttac ctactaaact cnatatgtac caaaatcagt caaagctcta 300
ctatctagct ctctttatct agactaaagg gagttgtcca cctcttggtc tagataacac 360
ttgcaataaa agacctgctc gtttccc 387

<210> 364

<211> 101

<212> DNA

<213> Homo sapiens

<400> 364

gctgagatct gcaaacctct gggctcgaag agatgaaggc tacattagcc aactaagacg 60
acaaactcaa ctcttccttg tcattaaata atttgccagt t 101

<210> 365

<211> 443

<212> DNA

<213> Homo sapiens

<400> 365

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aaaacccgga gagagggttg aaacaagggtc acgacctaat gctcctcagc cgtgcaggcc 60
aatgctttgt ggcgtcatca gctgcccacc gtgagctggt caccacttg agtccagttc 120
ccccggcac cncctgccta gtggataata tcatacctca cttccagca gagaaaccga 180
gtgcgagaag ttgaatgaag gtctctaggg atgctcttgg gtccatcatt cattatgtga 240
aatatgaaag gcctcaacca tatgttccca agccccctggg ttgctgactg gcaagaggag 300
agaagccact ccaccaagct gaaacagtac ctgtccctca cggtaggggag ctgaggcagc 360
cagcaaccag tcaattttg caggaccaga agcaccatta gaggccttgc ttgctgattc 420
attccatac ctcgttgatc tcc 443
```

<210> 366

<211> 213

<212> DNA

<213> Homo sapiens

<400> 366

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aggagaaagc tgaagcacia gatggttaa aggactgttc aagacagcct tgcaattttg 60
accaaggaag aaagctgaag agtgcctagg caagagagga actacgtcca gaacaattca 120
taattccaaa ttctcacttc catgatttca atgctgaatg tgtacttctc tagctaaaaa 180
tacaattgct taagtaaaat catcattatt tac 213
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<210> 367

<211> 261

<212> DNA

<213> Homo sapiens

<400> 367

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gtctctacttc tccaaaagac gttacatatt ccaaggatcc tgcgtctcaa caaacctttt 60
cttctgcaaa agaacagcct gcttttattc caagctctga gattccttat aggaagctgt 120
ttctctccag ttatgccatg ttatgcctta acctgggcca acagtgccta cacacggaga 180
atgcaatggt tgaggccaat tcattaacag ggattgttta gccacatccg ttgttaattg 240
acaacatgtc tatggaatta g 261
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<210> 368

<211> 455

<212> DNA

<213> Homo sapiens

<400> 368

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ccatccccga caaggtacca gacatatgag tgaagaatca tggaccttc agtccacccc 60
atccaccagc tgaagaccat gagtaacctg ggccacatgg agcagaatac ccagctatgc 120
cctgcccagc tccttggtc gcaaactcat taggacttgg attgatggac tctctagcct 180
gagactgagg cctccttct aatgaatggg gcagaaccaa gcacctcaa cctcatatga 240
agagcagtca aagaaagttt aaagcaaaat gaccataggg ggagggcagg ttgtgtgca 300
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gagatggccc tgaagaagag tgctgcatg gcaacacaaa gacagcagac aggctcatgc 360
 acttgccacc agtgggggtc taataaatgt ttgggggagg catggagatg gcatgtcttg 420
 cctgagtcaa caatcagaaa aaaaaaaagg gccgg 455

<210> 369
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 369
 gaacccttgt catccagaat ttcccaaagg atggtttgca gaacaccagt ctcaacagaa 60
 aaatctgttg aagaagtgcc ctgtgatctg gcctatttgg aatactccat ccatcttttg 120
 gaaaattaaa atatttatgg tcaagttaaa ggcgctgaga agtctgcag taaataaacc 180
 tgtatttact tg 192

<210> 370
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 370
 gattaatgaa aataaaacgc agacettata agcagacgct gtgattttgt aataaagagg 60
 ggcagctttt acaggaaaaa gaacccgagg gaagctgttg gcagtctgtg aaacgatggt 120
 catggtggaa ttcgttttgc tgcacattag atgttataaa cagctgnaaa aaagaaaaaa 180
 aggccagcga ggccaattca gcttggactt aaccaggctg aacttgctca aaagg 235

<210> 371
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 371
 agtctagaaa atatgaattt acaaccacag agaagtgaag acagtctccc agattctcac 60
 cccgtgtaat tgaaagtgat tgttgaacat tgctgatgaa gacaaaccgc tatgtaataa 120
 actgaataat aacttag 137

<210> 372
 <211> 186
 <212> DNA
 <213> Homo sapiens

<400> 372
 atttaaggat tcaatatgga ctgcctcaaa tataaaggga cacatttgct acatggtcca 60
 gagacttggt ttcttggccc agaattctct tgcctatca attgttgga agacactgcc 120
 tgcatttgcc cttttgctc tcctgttct gtacttgac tatcaaataa aaacaattc 180
 taatgg 186

<210> 373
<211> 163
<212> DNA
<213> Homo sapiens

<400> 373
atttgaact ggggatcccc tggaagaatc gtctggaaat tacgacctic atctggcgat 60
tgcagctgtt aaagtctcca aagaggccat tcttacattg tgtgtgaaa ttattactct 120
atctcaaatc tgtgccagaa agaaaataaa atgtgtgttt atg 163

<210> 374
<211> 64
<212> DNA
<213> Homo sapiens

<400> 374
gtatcatcga aacaggaatt ccctgacctic agtaatgagt attataaat aaatcactat 60
aaac 64

<210> 375
<211> 337
<212> DNA
<213> Homo sapiens

<400> 375
aaatcacttg caaggaagat tcagttaccc actgctacac tagaaagtta ggcttctctt 60
gcggcatttc acagtgaatc ccttcatcaa cacctggatc ttacaaaatg aagtacctca 120
gcaagctatg aagagaaagg gtgttctacc cccttctact ttctgccacc tcaccacaat 180
aaccaatcct atcatcatca tcacaactgg ctcttcata cctttaaggt cccttcaaag 240
aggacatcct tgaccacctic ccctaaaata tatatccctt tccatgagtg tgctctctca 300
gcaaccttct tctcagcaat aaaattaatg tatcatt 337

<210> 376
<211> 62
<212> DNA
<213> Homo sapiens

<400> 376
aaatcatgcc caagttcaaa caacgaagac gaaagctaaa agccaaagcc gaaagattat 60
tc 62

<210> 377
<211> 170
<212> DNA
<213> Homo sapiens

<400> 377

attggagagg atgaaggccc tgagggtccaa gaacatggaa acctgacagt ggacgccaac 60
agctgtggag agaagccggg cgacagctgt ggagagaagc cgggcgatat gctcacgctt 120
ccgtgtgccc agcaatcctg ctttatctt ttaaataaag gtgattcctg 170

<210> 378
<211> 313
<212> DNA
<213> Homo sapiens

<400> 378
cacctaaagc agtgactggt gcatgacagc tatggaagaa atgcgtagga taaatgcatg 60
aaagacagga agagaaaaag ccaactgggc acaggggtcaa aaactatgaa tgaagagagc 120
accacctaaa agactgcttt gcagaatcaa atgccacaga gaagcaaggt aaaatcaggg 180
gtgaaaaaag aaccgcctgt gtccactggt cacttttgtc ctcatgttgc catggcataa 240
taagaattta acagatgcat ttgatggat acaaagaaga cattctgggt taataaataa 300
cttttgaat atg 313

<210> 379
<211> 223
<212> DNA
<213> Homo sapiens

<400> 379
gcagtgttgt aagcacgggg acagagacgt acgtgagcag atggaacccc cgaagacctg 60
cagctgtcat cctgggactg tgtgcccggc actgtgctaa atgctccctg gggcatctcg 120
tgtaaccttt gcaggaaccc taaaaacgac gatcagatta gctcctcct cttgaaaatg 180
gagacaaaat tcaaataaca taaacttcac cactttaacc att 223

<210> 380
<211> 444
<212> DNA
<213> Homo sapiens

<400> 380
atatgagggt gttgtatcct aggaagaat gtcagcctct tgcacccct acaattggtg 60
agagaagccc tgacctcaat agcatgagaa gacctggatt ctgatgcgag ctccactagc 120
agcctgctct cctgactccc cagtgatcat ttctcctgtg tactctgggg ctgataccta 180
ccctgtctc ctgctttgcc ctgaggact ttagatgagc aaaatgcaag agacattcct 240
atgaaagtga tagattgtag aggtaatgaa gcttctcttg tgaatatgtg attgtctctt 300
ctctcttg tgatgtgag acgtgaaca gagtaactgg tacgtagcaa taattcctca 360
tatttttgca attctgggga aggaggagga agaggatgat gatatgaaaa cgggaaaaag 420
agagaggtga tccctatggt gggt 444

<210> 381
<211> 403
<212> DNA
<213> Homo sapiens

<400> 381

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ggtcttgctg tgtccctagg ctggagtgcg gtggtgcagt ctcaattatg ccagatggct 60
ctgagggtcca agtaaaagat aatatgtgca accaaatcac tggagttgac catcaaaact 120
ctttccagg tggaaaagca ccctgaatcc agcttctctg tatgaatgaa tactgagctt 180
gggttggtgg aaattgatt tcgagataaa gaatccagcc aggactgtga agccccaggg 240
aatggctgca ctcaagtca gaaggagcct gggtcctga atcatcatgt ggaaggctct 300
ccaccagtt caatggtgca atggaccaca agcaggaact taatttaaaa atgtgcttat 360
ttttgtaga tttgttaatt aaaaaatgaa tccactctg ctg 403
```

<210> 382

<211> 379

<212> DNA

<213> Homo sapiens

<400> 382

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gcactacaag caaatgccaa atacagggaa agtcaactag atggcagcac aagggaatg 60
atccctcagt cattccgggc ttcacaaggg aggatcaggt caacaatttc ccagcactct 120
ctgaggatac ggaagggctc agaactctc ctctccacc tctagggct ccttccttaa 180
atttgaat ctgcatcaca tcatattgca gggatgtgct aagaacata cagacatgaa 240
caccgaaca agaggaagct gaacaaaaat aactccatc gtacctagaa aaaaaaactt 300
ctactatatt ttataataa gcagaagtct attccatctt ctcttctgct taaaaataa 360
aataatcatt ttccaatcc 379
```

<210> 383

<211> 448

<212> DNA

<213> Homo sapiens

<400> 383

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cagaaaactga ggttatttgg atgaaatgct tatttcttt ttaacataag cattgactgg 60
aatatttggg tattctgtct gatattacat gaaggtcaga tgccctccat gcaaccatga 120
ggtcgggatgg cagtttgatg ctgaaccagc aaacaagcct actcagcatg agactatgag 180
tataaaaacc ttatgatga cctacctca ctggatcaa tgaagagaat aagagtggg 240
gacataaaca cattcaggag agaangaang acccatgttg atagtcacag ggaagaaaga 300
acagctcanc ctaacattac ccaagggcnn tagaaggcct gtacaaanaa ataccanccc 360
ctgantggac cnncttntg atcctttggn acctccag gcttcccag aantacaag 420
ggaaaaaatt anaaatttcc ccggtttg 448
```

<210> 384

<211> 278

<212> DNA

<213> Homo sapiens

<400> 384

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gcaggaagag tcctcagca gctattccag cccagtgag aaaccagaaa agatgctgag 60
acgttatgag acagtgaaga ccgggatcta tcattggact aacacagcaa tcatnttaa 120
catgcagaga ggagaggaag acttgttca tctattcat gttgcaggga gacgccaccg 180
```

atttgagttt caaattatgg cataatagct catttatgca aatcataaac aagattatat 240
aatgtgttg tgaatgaaat atacacacca atctaggt 278

<210> 385
<211> 162
<212> DNA
<213> Homo sapiens

<400> 385
tgcaaagtaa atgatggcag tgcctacgt gacagcaggg caacaagata gaaggaacct 60
ntcacggaat gaccatgcag agcaaagta ctcacaggc aatgactact cataccagga 120
ttgctacatg agcagtaaata aaacttctt gttattgag cc 162

<210> 386
<211> 447
<212> DNA
<213> Homo sapiens

<400> 386
ggcctcacca agagtcttgg cgtgaaggcc gacaatgcat atcctgccag gccaaagaaac 60
aggaaaaata taaacaccag tgatagagac aggaggcagc caaggacccc tctgcccc 120
aacacctgac gaaatgccgc cttcaagcct aaaacagcat gagggatgaa aaaccagact 180
gccggtccgg atgaagccca ccttttccc caaatgattc tttctgaata acgcccactt 240
gcacattggg aggaggggggt ggggccttgg gaagtttga ctgtttgcag gggggaggag 300
cctgtgtctc cctgtttctg tgtggttaagg tgggatttaa tcctgagat ggagagcctg 360
ttagcaggac tcttatctca ctttctgat gcgtatttcc ttttcattt ctgctaata 420
aattccactt gtcacccttc aaaaaaa 447

<210> 387
<211> 303
<212> DNA
<213> Homo sapiens

<400> 387
gcatagggat ttccagcttt acaacatgct atgaattatc ctctctgtg ttaacacttg 60
tgttaacctc atccgaagtc ctgggggatg tctgttcaa cctgccattt caccatagt 120
agagttggtc cacagtgaag agtggtgaaa agactgaagt ctttatacca ctngcatata 180
ttgttctga tctgcgtgt acatttcaga gaactggtga ataaactctc cgctccatgc 240
ctttctgctc agagagggtta catcttatat tctccaaatt taaattaaaa ttagcttcc 300
ttc 303

<210> 388
<211> 442
<212> DNA
<213> Homo sapiens

<400> 388

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ccgatcgaat gcctgctgca ctgctgaaga ggaaacagag tcgtggcctc cgggaggggg 60
ctcaaacctg tgactggtgc atgttcgcca ttagacacac tggctggtga ccagcagccc 120
cacctacaga attccctgga atgaggaatg gcattcctga gaccactcag cagagactac 180
ctcaaaaggc gctgctcaat gccaggaaat gcagcgagag aaaatcccct tccggtgcca 240
cctctgtggc cagcacacag gtccccctgt cagcgggtgt gtgtagacgt gccctcagga 300
agctcagccc aaggccctct ggaagtggcc acagctggac cacacggaac tcattccactg 360
cttcttggga gctccaggaa agcgccagaa gangggcact gaggcagang gaaagctaag 420
cagcctgtgg ctcaaaacat ac 442

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<210> 389
 <211> 111
 <212> DNA
 <213> Homo sapiens

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<400> 389
gtgaacattc ctgaggaact gaaatatgaa atctgtcaag tcacatacag agatcctgta 60
gatcattcaa ctgcccattc caaatcatcc aataaaatat gatgcttctc t 111

```

<210> 390
 <211> 447
 <212> DNA
 <213> Homo sapiens

```

<400> 390
gcataactat aagcccaggg aagaagagtc agaccagtg ccagcgcagg ggaaacgcat 60
ctaattcaga acagcagaca cagctcctct cccatggaac acccagagca gacattgcca 120
gtcgatcca gcacccttcc cccgggagcc tgggtcagc ctcaagactt tgctccgct 180
tcacaaagct ctgcacagcc agttctcatc aattggagt ggtccaaaat atggaaactc 240
ttgtcttgc ctgacccaaa ccattcctct ttccataac aattctgaca tttaaaaaca 300
gcagaattcc ccaacactca tccccgggaa aagaaatttg gcattgttg tactttcaac 360
tctgacctt ggtcaagctg ttgagtcaac ttgtggtga gtctgagccc catttctgca 420
gacagaaaga ccgcatttgc gtttttg 447

```

<210> 391
 <211> 336
 <212> DNA
 <213> Homo sapiens

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<400> 391
agttagactg gctgagcaac ccaagctttt gtgttgatc cataacgtcc ctgagccaac 60
aaactgaagc agctccagcc catgtttctg aagggttacc gctgacaagt ggcaagtaca 120
tgacacagtt agtgccgtga attaggccaa gagggaaatg gcatcattgt gattctcgag 180
taactttact agcctcatta gtaaccttta gaacatcata attcaggagt catctgaaat 240
cagagtcttc agatgaaagt gacactaaca aaaagctcaa acaacaagt agaaaaaaga 300
agaaagagaa aaagaaaaaa agggagcatc agcatc 336

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<210> 392

<211> 76
 <212> DNA
 <213> Homo sapiens

<400> 392
 taaccagtga ggaactgagg tctccagca accacctgtg tgaagttgga agcggcgctc 60
 tctctctctc tctctc 76

<210> 393
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 393
 gggctctcac tcagaatgcc ctccctctaa caaggagata attggagaca cagccggctc 60
 tgggctgtct ctgagttgaa agaggcacca aggaaccttc aacttcaccc tcacctcag 120
 gaaatgggaa ttgttcttcc ccagtttca aagaggagaa gcagcccttc ctagctggga 180
 catgatatta tgttcatcac taggacctgg gccctgtgtc cagctctgcc attagacctt 240
 aacctctgtg ctccacatat gtccaacgag catgagatta tccaccccat tatgcatagg 300
 atgtgcagta ggcagaattc taagatcgcc ccatgacctc tgccccctgg tgttactgct 360
 atgattatgt tatgttccat tgcaaaaggg atttgcctt tgcccatgta attaccgtta 420
 ttaatcagtt gaacttaaaa ttt 443

<210> 394
 <211> 439
 <212> DNA
 <213> Homo sapiens

<400> 394
 ctttcatatt aatctgttac ctaatatggg acgtggcgag cggcagagag ccagaccgac 60
 cttctaaaac caagactaca gaccacacac atagccttga agatccgtga acttctttat 120
 aaaggggtgaa gtttcatcaa actaaggaat gaaggggaaag gaaagaataa agaaagaaca 180
 atgctttttg tticcagagt attctttttg ttactacaa ggtggcaatc agatatctgt 240
 agcaagcttg gatcagtgac gtctgagata cctgtttatg gattattcat ctgttctaca 300
 taatgacatc tccacctcca gacaaaaatt tcatagtatg attgtagatt cactgtgcic 360
 ttatctgtat gcagaagaat gggaattggg acccttgcca cacactgtg aaaggaaaat 420
 aaatctttgg ggtcccaaa 439

<210> 395
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 395
 gtggcatgtg gacangcagt tggaaagaga aagtacagaa agaagttaaa agtatgctag 60
 aaaaaacagt aagtgaagaa atgacagagg tgccaaagcc aggtgaagtg aagaggtatc 120
 atgaggcaga agtgtcttcc tactctgagc gggatccag gaccagcagc atcagcattc 180

cctgagcctc atcccagacc gacagaatct gcattctgcat gtaaaaaaga ttcccgggta 240
 atttgcaagg atattgaagt ttgagatgct gtgggtggtgt ggtttaaacg ttgaggtctg 300
 gaattagaag gcccaattca agtatctgtg cctctcatta gctatgtggc cttgtacaag 360
 ttattatat ttccaccct aataggtaga gatgaatcta tgctaaacac ttagaaaatg 420
 cctggcaaat aatactatca ttcttt 446

<210> 396
 <211> 221
 <212> DNA
 <213> Homo sapiens

<400> 396
 aagaggaaac tgaggctaag agattgagggc actcatccac tggcaagtcc cagcccagca 60
 ggactgcaga ggatcaagac ttataagaaa accttctaa caccagtgc tgccttggtt 120
 ttccagcgca aatcatactc aggaagacaa acatccaacg tcactctctg cttcttgggc 180
 ccggaagaat gttataaaaa taagtaactc atgaagaaaa c 221

<210> 397
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 397
 gcctgcacta tgtactgcta agtcaatttg tggatttaag tagcagggtca attctatcaa 60
 atgtctgtgg gtcactgaat aaattgagga caatggcgac aggaaagcta cctctgacct 120
 tgacaaagca gtttcaatgg agtaggggtcc atgagcagac gagcagatga acagatgtac 180
 agaagagcag agaggcagag aagcagctca gcagagaagg agagaagaga agagtctgaa 240
 cgtcgagagg agttcagctg gagacagcca gagaggaggt cagctgtgga acagccaaac 300
 tccagaggaa gatcatcttc cactccatc cctttccag ttccccacc gtcccattaa 360
 gagccaactc catcatccaa taaatcccc atattcacta tc 402

<210> 398
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 398
 ctatgaccac gaaggccgcc tgaccaacgt gacgcgcccc acgggggtgg taaccagtct 60
 gcaccgggaa atggagaaat ctattacat tgacattgag aactccaacc gtgatgatga 120
 cgtcactgtc ataccaacc tctcttcagt agaggcctcc tacacagtgg tacaagatca 180
 agttcggaac agctaccage tctgtaataa tggtaacctg aggggtgatgt atgctaattg 240
 gatgggtatc agttccaca gcgagcccca tgcctagcg ggcaccatca cccccaccat 300
 tggacgtgc aacatctccc tgcctatgga gaatggctta aactccattg agtggcgctt 360
 aagaaaggaa cagattaaag gcaaagtcac catctttggc aggaagctcc gggtttaaga 420
 atgatgggtg gccttc 437

<210> 399

<211> 132
<212> DNA
<213> Homo sapiens

<400> 399
acatgatatc tggagatgca agaatgcaac aacctcttg ccacaaaag aagaaaaaga 60
tgagaacaaa agtccaagt ctaaggatgc cctttcacg ttctgtgaat taagaagaaa 120
agaaaagaaa ag 132

<210> 400
<211> 260
<212> DNA
<213> Homo sapiens

<400> 400
gccctgggaa gattacgtag ccaacactgg tgtgaaaatc atgcctatgg agggttcttt 60
tggaaccag aagaacaga taaaggaggt gttattcat gaaaccagca cttagaagac 120
tgcacagca gtccagctc catgattaca agctcctcga agacatggac cagatcacac 180
ctctcctgtg tggtaaggc caactgcaca tgtagaacgg tgttccttct atgcttgga 240
caaataaatc tcacaaaatc 260

<210> 401
<211> 292
<212> DNA
<213> Homo sapiens

<400> 401
cacagaaaag ttaagactct tcagtgggac ctgctctggc cagtgaaatg gaaaagaaag 60
tgacatgtat caccctagt ggaaactcta agagccagt caccatttac cgaattttat 120
ttctgcctt ggcaatttg gatgaattc catcagccta agtacctgag caagcccttc 180
tacagacctc tactagacat gtagcataaa ggagaagcaa acttttgta tattgagtga 240
gacgtatcat ccattctaataaaaaatca taataaaacc ttctaaaaga tc 292

<210> 402
<211> 194
<212> DNA
<213> Homo sapiens

<400> 402
gacagcactt ggtggtgta cattgatagc ctgaaatcag ccatcgtgag agtatttaca 60
ctacaaatca acaaacatta tacatcagag gttttattga ttgttgact gtctagacca 120
gggatgagca aactacaagc aaatctggct taccacctgt tttgtaaat aaagttttat 180
tggaacacag ccac 194

<210> 403
<211> 294
<212> DNA

<213> Homo sapiens

<400> 403

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acaagatatt gctgagatgt tgcccagatt ggtctcaagc tcccaagttc aagcaatcct    60
ctgaatcctc tggcctcagc cttccaagta actgagatta caggcatgtg tcatggtgcc    120
caatttatca atgcgatgtg tctacaagtg gagtggcaca ttcaaatatt tgttgctgtt    180
gtcatttgtc cattcatttg ttgactcagt agcattaact gagtgtctat tccaatgtgc    240
agacactatg ccaggtgctc ggggtggaagg aggaataaaa ataatggtca taat      294
```

<210> 404

<211> 347

<212> DNA

<213> Homo sapiens

<400> 404

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gtttcttttt attgaagctt gaagctcaag ttcatggctt catcaaaaga cgttcaaat    60
cctgaagttg agatagctct cacctggagc ccgtgtgttg ttctaccctt tggctgggaa    120
cacagtcacc tgggaatcat tccagcaggt ggcttcaaaa gtccaacctg ctagggtgaa    180
atctgacact gacacagact ccgggagctg ccgcggaaaag ctcaaccagg aaccgggaaa    240
tgcacaagcc tcttgatgca taaaacagc tgggctccct tggagacaga gcgcatggg    300
aaaccgggtc tgtctcggag gaagctggag ctgccatcaa cttttc      347
```

<210> 405

<211> 428

<212> DNA

<213> Homo sapiens

<400> 405

```
ccaaaggaag catatacccc tggcaaaact gaccagcacc tgaacactgc cccaacagag    60
aactcaccag aagacccttg agtcgggaat tccttctgtt gggtagaact tggataaac    120
aagtaagcca agcaaggaac ttacaccaca gcccagttaa caacaggatg cccatgagaa    180
cccctgaccg gactcagctc cctaaccctg tccacaaatg gcccgggctc tgtgccaatg    240
actaatctcc aaagtattca gtgaagcgtc tgctccattc gggattttt cagatgggca    300
tttggtttc atcaagccct gctttctccc gctccgtgac ttgcatcag ttgtcatgag    360
gatgattaaa taatttagca cttaaccccc tgctgtactc ctggcctgg atcatgacca    420
caccgaaa      428
```

<210> 406

<211> 299

<212> DNA

<213> Homo sapiens

<400> 406

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cctgcattaa acgagactga gggtnagcca gctctccagg gatctctcag ccngggcgga    60
cagaaatgga tacccaatgt tacttgcttg gccccctgac ctgatgggag tatgacctac    120
tgggcagagc tcagctcagc taccceaaga agtaaacagc acagagggaa agataaacct    180
tccaggcttt ccgaaagcaa ttatcatgtg tggttatcga aaattgtat tcaatatccc    240
```

gggggaagga agcagagata caaataaacc cagaattgat attgcctgg ggataaatt 299

<210> 407

<211> 418

<212> DNA

<213> Homo sapiens

<400> 407

atgataacaa aggcctcaaga agattaagga atcggcagat gtgggatgtg caatttcctt 60
atggctcggg agatgatcaa gttaaacagg cacgctatta tgaaaaacca ccaataaaat 120
gggagaaaga cataactgct gctgtatgtg gagactgcac ctcagcctta attgacttg 180
ccgagcaaga acaaattggac agcacaccgg gtgcttgtt agttaccgcg gcacatgatt 240
atgaggttcc cagaaggcat cttcttcaca tgtgagatca ctcagacttc agcacttggc 300
aatcagatac aaacatgtgc aagtgaact agaaattgtt tgaaaaagct aatgatcttg 360
ctctagattt tttttttaa tnaaaaaact tntngntcc aacngaatg gaataaat 418

<210> 408

<211> 435

<212> DNA

<213> Homo sapiens

<400> 408

gtccgccaac catccccga tccggccgtg ttaacttcc ttgcccagtc gtgatacccc 60
gtcagatttc tggcgtgcc acgccgccg cctgggctcc ttctgggctc ttatcaacct 120
ctcccagtc gtctggcccg ccacagctgt tccaggccct cagccctca ctttatctgc 180
tcgcacagac ctggcctgg caagcgggtg gctcgggcc tctccacat accccaggaa 240
gccagctggg aacacagccg cctgtctccc ggaccctctg agagttcatt accagccagg 300
gtacccagc ccgtcagcca aggtgcgggc cgcgtgccg agcccggccg nccgagccgc 360
ctggatcatt aaaactncac cctnttgaga gaaaaagaa aaaaaccccc nctttaatt 420
ntaaaaggct ttggg 435

<210> 409

<211> 399

<212> DNA

<213> Homo sapiens

<400> 409

agtaatgtgc ctagaaggag acagtgcac gaagcaagtt tactctcagc atgtcaagaa 60
aacattaaaa tattatttgc ctgatgattg cattggacac atttgtgaa atacatgagt 120
ccctctacc tgggatgtca agagactgct ctttctgtgg gagaatggac tgatctttg 180
catcagtcac acgtgcttt tggggagcca ttttgatac aatatatgta ttgcttcctt 240
taaatgggaa ataaccatgg tctgtcaaca aataatcttg ttgataaat ctgaccaga 300
tgggtgtgcta ggttgcaaaa ccgtcttctt ctgctttgga aaaactcagc tctgtccctt 360
catcccttc tctgccacca gcctctgtcc accccaag 399

<210> 410

<211> 79

<212> DNA
<213> Homo sapiens

<400> 410

aaaaagtctc cctctggagg acaccaaact gtcacnggcc cgcttctatn actccctanc 60
cagnanggta aggtcagcc 79

<210> 411
<211> 393
<212> DNA
<213> Homo sapiens

<400> 411

gaaggcataa aacggattca cgtataaagt tattgcctcc ctgagttcct ggtgctgtgt 60
taagtgtctg aagtatgaag gcaaatggaa gtgagatttg ttctgtcct gcaagaactg 120
tgagccagga aagtagctta gaagtgacca atatgtcaag gtcccatgag aagactgaaa 180
aaaagagaag aaagaggaaa gaaaagaatg acaagaaaaga gaaagaaaaga aaccaatatg 240
ctctttgttc ttgtttttg ctctctcaag cttttctctg tctacaaage caacctctcc 300
tgctcagctc atcagaacat tcaactccact ttctggaatg aggtgtgtgc tgatcctaga 360
agtcgaata aagcccactg agatcgtaaa act 393

<210> 412
<211> 325
<212> DNA
<213> Homo sapiens

<400> 412

ggtctccctc tgtgtcccag cctggagtgc agtagcatga ttccagctca ccgcaacctt 60
gaccttctgg ggctcaagtc atcgagatta caggcatgca ctaccacatg cctgatgtga 120
gtgaaaaat ttctattgcc tggtagatc atagtcattg taacaggtgt tgggtgtaaag 180
acagacctac agatgaatga aacagaacaa aaaatcccca aatagaaccg taaatgtatg 240
ccaattgatt ttgacaatg gtgtgagggc aattcatgga agatatgtat aagaaaataa 300
ttaaataaac ctgtctcaat ccatg 325

<210> 413
<211> 209
<212> DNA
<213> Homo sapiens

<400> 413

ggacgttcta acataccgga aagtgtggca tcaactacct tgaaattgga caaatcagc 60
tttgagggtg ctaagctaac taaatccatt ccaatggaag ccagcccaca ttgcagctgc 120
tgaagaagct accctgactg tacccaaaca ctcaagcaaa cgctttcttg ctgactaaac 180
tgaacagtat aagaaaccag ggtgagcac 209

<210> 414
<211> 444

<212> DNA

<213> Homo sapiens

<400> 414

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tagtgtctcc aacaccatct tgaagggtgca gtgacttgca tatagtaggt gcttgatatt    60
taccaagtac ccctgtgggt caggccctac tctcacccta aggatacagc aggaagcaaa    120
gcagaggtgg agaagatccc actaaacaca caggccgctt ggaatgttgg gccatctgtc    180
cttttgacat gaattttccc tgtaatgggg gtagagctgg taactgttgg atcatttgat    240
tattggagac agaagtctg tcacttgccc ctgctgttag gaggtgggct tcctgaatgg    300
ctttctgtat acatgaagaa ttcaagacc ttccgttaag gggggcaaga gctaaagttt    360
cagcgtttac aaagaagnct ctggctgac ttgctataa cttacagcac ctgacgtttg    420
gacacctttt cttttttgg tttt                                     444
```

<210> 415

<211> 558

<212> DNA

<213> Homo sapiens

<400> 415

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acactcaagt ttccacaca tgactggatg gccctggcca cactgggaac ggaatggggg    60
cctcccattg gaactcaggg tggaggggga agctcgacca gctattgtgg ccccacttc    120
cattgacaaa atgtgtggtg gagacttgct ctggatgct gtcagggaagt atcatctgac    180
tgcgtttgct acctgggggg agacaaacaa aacttgagtg aaggaaaatg agaactcacc    240
tgaaaccaag aagagctttt ggaaaaggat tttgtggac ctcatcaaat aaccaggaaa    300
gattaatcac ctgagaagag aagagactgg gaatcttcac cctgcccaga cagacttttc    360
atctattctc ctgagagcag ctacaagaga ttacctgtgg gactcaattt gcataataag    420
atganctttg tttctgggca agtccacccc ccantttcc ataatgnctg gctnccacct    480
nccaggngca ttatttttnc ctaatgactt actgctecta aaanaaagnn tacctttcca    540
ttctcttc ctatgaa                                     558
```

<210> 416

<211> 232

<212> DNA

<213> Homo sapiens

<400> 416

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gggaatgaag aaaagaagaa gacaaaaatg aagacaaaga aggagaagga ggagaaagag    60
gaacggagac ggagagaaaag agagactgat ctggactcat atcgccctgga tcttgaaccc    120
tgacttttg ctgttattgt tgtctatat gacattgac atattagtaa atttctgtg    180
cttcatttc ctcatctgta atgtgagaat aaaaatagta atgctgcttt tg          232
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<210> 417

<211> 404

<212> DNA

<213> Homo sapiens

<400> 417

caaattgcag agaatccata catgtaagga cctgtcacta actgattgtg ccaactggagc 60
 tccatggaac ccatacataa agcacacctc ttctcttctc cttggcatcc aacctgctgg 120
 ctctacaact actttcaaca atgagtcaag gctgtacctg gcaagatgga aattcaaaat 180
 caacaacgaa agctatttat ttgggttttg atcctagccc tgggcctttt actaagtatt 240
 cagaactgat ttaatgaatg aaaaaatgaa tgaatggtat acatttccat tgtctattct 300
 gcttcttttc cctaggggaa tgtgttaggc catgatttcc ttgctggttt ttcatatgg 360
 gtgggtttat ggacacgct taaattaaat cactagtcc attc 404

<210> 418

<211> 443

<212> DNA

<213> Homo sapiens

<400> 418

aaagttgaaa gtagctgata tgggaccaca gaattattggc caatcagcat tgtcttaatt 60
 gaggtcttac ttcaaggaaa cctgatccca gaaaatgcct aaaacaaaa cagagagtat 120
 gtggcacttt ttaatttttt cctggaatca gtggtcataa cccagtttac tgtttgtgtg 180
 attctaaaat tctggattgt ggattgttcc ttccaaaatc tgctacttgt ttgctgcatt 240
 caattggaac ttaaaataga ttttaaattcc atcctggtaa ttccagaatc attcatttcc 300
 tgtccatctc gtcacttatt ggccaagttt ccagtcttaa cactgctcta ctggagtaaa 360
 agggaaacctn atgggttttg ccanaggggg aatttagggc cttacagctt atgaacctat 420
 agggggggng gatttataag gca 443

<210> 419

<211> 971

<212> DNA

<213> Homo sapiens

<400> 419

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 actgctcacc gtagatgcac ttctcttggg atcttttggg ggctgtctcg ttggggacgc 180
 anacatggaa ccacaanacc tttagctgtat ccccttctat gggttctcct tcgaagtacc 240
 ttgcacctct aggacacaca catgggggaca acgatttctt acaaacacca cattatcttt 300
 tanatatttc naggtgtcna anaggaaaat gggatacgaa nagggccctt gcatgggacg 360
 acaccgaaa agnncgcaan angacccaaa ntacggccna ttggccccc cttggttnga 420
 annntttng ncaacnccct taattaacgn acccccnca ggaancgggg gcccnttgga 480
 aaaanattnt acctntanan tacgnaaaa nccnccncaa acacacetta naggaagnc 540
 atagtaattg gncctccctt ttgactcccc cccatctccc tnttantact ttgggattg 600
 ggaacntatt ntcccccat cgccaatcga aaagaggcgg aaaagggttg ncttattana 660
 ctnggggggg cccggggggtc ncctttttgg gccccgttt aanaaagngg ggaatgggga 720
 accggtttt aacccctttt ggggttggga aaagggnaaa nngggaaatt ttnccntt 780
 ggggcccttt ccaattttnc ctnggggaa tttcnggaa aaaaaaacc aaccccggg 840
 ccccaacctt tggaaaagcc caacccctt ttgggnggg aaaccccccc cccaaacntt 900
 tccctttggg ggencgggc cccaaggaaa gaaaaacca aaanccccc cncnccctt 960
 ttttgggac c 971

<210> 420
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 420
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 tcttgctctg acaccacctg gctcccaggg cctntgggca gctgtggctg tgcagcccct 120
 gcttttcacc tgtctcctgt cctggagtg cgtntgcac ttcagtgtgt tagttgcacc 180
 actcctttaa gagaggctca tgccttacct tatccctca atgactgtct tattttgta 240
 tgcccctaag agcagagcat ggggctagag tggcaggtag tgtttcaata aacactgtt 300
 gacttac 307

<210> 421
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 421
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 gactggagag tgtgagaagg cagctcgggt gccagcactc caggtgccag cagacggggc 120
 tccactgaag acacgatgct gcaaaactgaa aacaaaacaa caacagcagt ggtctgagaa 180
 gagcactgtc ctcatcattt gtattataag agtacagggt ttcccccat gagctttta 240
 gtgaccataa aagaccgttt aatactgcac agttt 275

<210> 422
 <211> 440
 <212> DNA
 <213> Homo sapiens

<400> 422
 gtgaaatggt tgtccataaa aaagtgggtga gttcagccga agaaattgct cgtgttttc 60
 ctcaagacag ctatgaagca aaagtgcttc atgcacagct tccattttgt cacaaaaagt 120
 tgtgtatgca agagttgaga ctgaataaaa ttaattcata cagctttgtc agggacattc 180
 ttaagtgaag ctagcatctg tattttttaa agcaacaagt acatggtgac actgaagaat 240
 ccaacgatgg ccacggcagc gtgccgccac ttcctccac cctgcccata gctccagcag 300
 gttcccctct gctgcttctg caccctcagt gcacgcacat cttangagcc naccncactt 360
 tntaagcttt ttgcnatnt aacctcatac accagcctcc acaagnggcc ttgtttccat 420
 ggagacagtt gccagctga 440

<210> 423
 <211> 229
 <212> DNA
 <213> Homo sapiens

<400> 423
 cagggagata ccagggtctg tcatgggcag caatgactac gatggacaag aagatagagg 60

ccctaactct aattttctga gcaccatgga agccccctgg attctaggga gaccttgagg 120
 agaaagaaga ctctgtataa tgcctgacat tgaaattcct gcaagtctag gagcatgtga 180
 actcaaatg gaaattaatt tgatgtaata aaaataaaga agaagaatt 229

<210> 424
 <211> 100
 <212> DNA
 <213> Homo sapiens

<400> 424
 gagacaaaac cagactgaca agctgaagac tcaaacatta atcaaactgc gctccggaac 60
 aacctttccc tcgcattaat aaatacatTT gcggcccctc 100

<210> 425
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 425
 actgattcct gcatagccac tgaccacagc ttctggaaca acaaaagcat tgaatcatta 60
 atcctgaatg tggccaatga gcaagagatg aggaaatcta cccagttcat gaccacaaag 120
 caactcacca gcagctggat ggcctgggta gcttatttct ctggagagac tcttagacag 180
 tgactcctga tacagagatg ctgagactgc attttgtgcc tggaggagag aattaccacg 240
 tgtgattga gagcatcagt gttcctccag aagagacatt tctaaatgct gctagtgcga 300
 aaaatgagct tatgttcacg tagccccctgg gggaagaaaa acagtaatat ttaacagtac 360
 attttaagaa ccaataaaat tatttttaaa atc 393

<210> 426
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 426
 ggagatgctg tcagaagccc cactacggaa acatccaag gcctactatt acctaaggtg 60
 acaccactca gctgtgcagg ctttctccct gacacaggaa accattcgca gacattacct 120
 catcgctcta atctctatc aaacctgtga gacaggtaac agaaggtatc ctcaatttac 180
 ctgtggggaa attgctgccc aagcatcaga gcttccact ctgcaaacac tgcaagtgtc 240
 cctgacacca gcacagacta agaagtgggc atctctggct tattctggga ccaagtgcta 300
 aactgcaaat ggacctctc tctatcccaa ttcacaggg gagaaaaatc tnggttaaaa 360
 aggggngcct tntttaagc agctgtctca ttaaggnca tccgacttgg gcagcaattt 420
 tagtacttta caagccaagt atgtttgcag aaactctagc a 461

<210> 427
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 427

aatccatcat gatcctatgt gggttctgcc taaggaagac ttcaaggca ggaggccctt 60
gaggaagaac agaatcatca tgtcatcatc cagggtcctc tatctctggc aaagactggc 120
ctgatgaatg ggaacagagc tggaggcctg ggtatctttt gactgcaaga gtaggggtg 180
gcgggggtcga tacagtctcg cggcagccaa gacatcccca acctgtccct gaataacaga 240
caagtctaca ttctctgaaa ttctgtatca ctgtattggc aataaacacc tagagaagta 300
agaaaggagg agctcctaca aaaaaaaaaa taaaaaaagg ccagcgaggc caattcagct 360
tggacttaac caggctgaac ttg 383

<210> 428

<211> 573

<212> DNA

<213> Homo sapiens

<400> 428

ctctgtcgg tctgaacac ctggcctcaa gcgacccctc cacatcggct ttcaaagt 60
ctgagattac aggttgtgaa gattacagaa atctgggatg gcttatggga cgcttctcag 120
ccctaagtac gaaaacagca gtgaaaatgg caaccaaaac atcacgcagg actgggggtt 180
ttggggaaac agctcacttt agagcagtgc agttagagc ttccgtctt ctaccagggt 240
ccaccttaac cactgtttat ctgaaaattt tccccctggc ttactcgtt gcagctgccc 300
actttgcaga aggatggcgc tccgatctct acgtccctg ttcttcagg gactccatag 360
tattttttt cagcgtcgt cgctactaca gcagacgctt gcgttctcat tatttgctgt 420
acagatcctc ggtgccttga ctgtaaacaa aacactttan atcattgtga ggcatgtaa 480
gcacagcctt tctgtggca gccagacttc ttaagggggg gngactgnga ctgtctact 540
tttcgagatc acaaccacca agcgacaaaa tgg 573

<210> 429

<211> 372

<212> DNA

<213> Homo sapiens

<400> 429

tgttctagcc cagtctacag ggaatgcaca gtgagggttt ttgtgtcctc tgcttcacct 60
tttgatgtna gagggccaaa aactccaccc tcaggctgtt gtaaacacca ccatttttg 120
aacatgagtn ctgtggagat gtgnagaagc tccattgtgc ttatgcattt ttctccttc 180
ataaatatnc atgactcctc ccatacttta ttcaaatata gtatagtcca tgccaacctg 240
ctnaagcang aatatcctga tcccttngct cctcccttga aatgcctagt ttgctcggct 300
tcaagantag anaangctac ngctnngcgn ngcatngtca ttaatnncn acccctgnaa 360
gggggggcaaa cc 372

<210> 430

<211> 426

<212> DNA

<213> Homo sapiens

<400> 430

atgggaaaac tggagcccaa aggatggaaa tactgaaccc atgggctctg tcactagact 60

gcatcccagg gcctcaacgt aatatattct taatcatact ggggtaacct attagaaaga 120
 accctgtcct ggaatcctgg aaaagaggcc ctgctaggag ctgaccttgg acaaatcact 180
 cccttctctg aacctcactg ttcagggggc tgagaacaga gggtccttaa ggaagagtgt 240
 tgtatgagaa cagtctccgc tcttgaccca agcaaactcg gttcaaate tcaactcctg 300
 tggetgacta gctgtatgac cttgacctt ctcagtttcc tcatctataa agcaggatta 360
 ataaaaggta cctatcta atgactgttc tgagaataaa atgaaataaa ctacataggt 420
 gatttg 426

<210> 431
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 431
 ctgcttctc tggtcattga tgtgtcagct cccgctgtgc atcancctg ctgctccccg 60
 gaagccccgc cttgcaaate acaaaatgta cccagcactc cctcaccag cctggattgg 120
 caatggcccc acaggacaca tgggaatgat gatctttaag tctcagatgc ctcataaata 180
 aagtggatgt gatggtgcca aatctgactg aaaagtgggg aatcagctga cctttccag 240
 ggattaaagc atcacctgct gtgcaggggt tttgtgatac atgaaggcgg tagtgcattg 300
 acggtaccag gagtaacatt atgtnattt aaataacaag ataagtgt 349

<210> 432
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 432
 atgtttccaa aaataattca tggaccttat taaaattgaa aacgttgctc tttggaaaac 60
 attgttaaga aaattaagag gcaagcctca gattgagaaa aacatttgca atgcactcat 120
 ttgacaagtt aattggatac caataagcaa ggatttacta tgtgttggaagg gaaaacat 180
 tctgcgcat acttctacta accaactgga aaaggcatac aattgaattg cgggagagga 240
 aatatgatga ccaaacttgg caagggaataa aagttagccc tcttggtcaa cctgggcaaa 300
 tggagaacat gcaagagact tacgaggatc aaatttcaa atctttcatt gaaataaatc 360
 aaatgagaac 370

<210> 433
 <211> 138
 <212> DNA
 <213> Homo sapiens

<400> 433
 ggcagagctc ctggaaacca gcatgaaata ctggagtcgt taatttctc atatgaacca 60
 gaaacaattt tactgctagg aaatatgact gtattataca caggcaatat aaaatcacia 120
 ccacaagcac atatgggc 138

<210> 434
 <211> 394

<212> DNA
<213> Homo sapiens

<400> 434

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tttgaagac tgggaagtcc aagatcaagg tgctggcaga ttcagtgtct gatttcctg   60
gtctcatctg tccttgccgc caagatggat tatctgcagg aacttgacc aacttcacgg   120
aaccttcctt atgttctgtt catactgccc agacctgccc tggttcctt gttgtcctg   180
aggcagaaga ggcctttgga ctactcggc cccacatctg tacagtccag agatgctggg   240
ggaattaaca ccacaaaagg ttgactttag atcaatgtga gacaagtatt tcaactatga   300
ttgtgtattt gtcagtgcct ctttgaatt ctgtgagttt ttcttcat ttattgata   360
acatactgta taataatgca cattttaa tctc                               394
```

<210> 435
<211> 463
<212> DNA
<213> Homo sapiens

<400> 435

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gaacatgtct ggctgattt gaagctgcta catctgctt gaaagaagcc acataacctt   60
tgctgctact tcattcaaa ttctcttg aattttctat ttctgagct gggagaaatg   120
agaggatgca cccttccct tttaacagg ccttctcac ttgctctgat gagtctggct   180
ctcaagtgag ctgccctgat ggagaggccc gcatgtccag aatgaagcat accttctgcc   240
aacagccatc aaggaaactga atccttcta caaccacgtg ggcaacattc gaaggaaatc   300
ccccctagc caagcttga gatgactaca gcccagtg acacctccat tgcagtttta   360
taaaagacct gagacagagg accagctaa gccatgggct agccaggatt tctgacctta   420
taataactgt gaaatagaat aataaatgtt gttgtgttaa gtc                               463
```

<210> 436
<211> 450
<212> DNA
<213> Homo sapiens

<400> 436

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gcagcacata ttcccatag aaatgtggaa tgtaagaaag gcacataaag caatccaagt   60
tgctgcaga tatccacagc ctacttcagt ctcaagatg ctctttaa ctggctatat   120
ggagagtgta cagaaaatac aggatcatca atcaatgata cagtaaatac agaattctc   180
acagatgatg aatgtgtcc ttcagcttct gtggtcactt ccaccttaa ctaaagttgg   240
agttggaaga aaggcaatgt gactccaaac ttacagtac ctccatctta gacaaacag   300
actcttctct tcacctgcgt gccagctgag ggagttctgt tccattgctg tctccgggga   360
ctctgtcagt atatttgatg taatacttgt ttctgtccat aaaacatgtg atgatgagaa   420
gatcgcagtg cagatccaaa atcatatgct                               450
```

<210> 437
<211> 415
<212> DNA
<213> Homo sapiens

<400> 437

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aaatctatgc gaaaacaata cacagttctg gccaaaagaa gttaaacaat atgtgaaaa 60
taagcgacat ccagaaactt cagcagctcc ctctgtcct atgcctcaag gtaccagaga 120
gggaaaaagg cccccaggag aggctgtgag gaaacctgaa ctgcaaaccc accacgatgt 180
cttctggga aaggcaagtt ggtaaagaaa gatgtgaact ctatttcagg gtagtatgtt 240
ttttcattt gcttcaaga cttgatgga atgactgag aggaaaagtt cacaattact 300
agaaagaacc taaaaggaca tgagagatga aaccgttgca gtattttga aataaatgtt 360
ttctgcaag agcagagtca aaaaaaaaaa gggccggggg ggccattca gttgg 415
```

<210> 438

<211> 471

<212> DNA

<213> Homo sapiens

<400> 438

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ggcctctgaa ttttgcattg gctcatatca tctaggga aaacaagata ttcttagct 60
tcccttgatg ctggatatgt atgggcaact gactactgac caacagaatg tgaaggaaag 120
tgacaagcac gcctcccagg actcatctta aaagagagag gacaaacgcc tatttctgc 180
tccctactc aatccctctg ccggaacaa gaagatactg agctttctg gaccctgtgg 240
atgagaaatg acaaaaaata cataactatg gagtttaaaa tcacaggttc catcttctaa 300
tgagcctatg tttattgccc taagtagcat aacagtaatt gtccagaat gcaaaaatgt 360
acgagatgta ctctggaaat ggaaaaatac tttcttcaa ttcaatgaac agattctgaa 420
tttaaacaa ccaatantt ttttaaaagt aacacaccta gcaagaata a 471
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<210> 439

<211> 647

<212> DNA

<213> Homo sapiens

<400> 439

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caccagtggc tctgacagtt ctctctcaga tggcttctct gttcacctag caaacatagc 60
agatgagaat aagaagccag gctttacagt atcatgctct ccaagagaa ccataaactc 120
cagccaagag ccagctccag gtatgaagcc aaactggcct aggagcagat atcctgccac 180
aaagagaggc tgtgctgcca tggcggcata ccatccttg cacatataca cataccgta 240
ggtgagcctg ggctgtgcca cacaagcact tcatcggggg tttgagatt agacacattt 300
tataatgggg gagatgtatg actgggaact gcatttactt gtgtgtatgt gtgtgtgca 360
ctcatgact gaccttacac ttgtactta cactgtgggc atgtgncaa gatgcatacc 420
tcatgaattc aactattttt tcataaaatg aaattttatt atgatgtgna aaaatgcttt 480
atcaciaact gaagtgtggt ctcatgggcc actttatggn agcacagata tacctcattt 540
taaccaatag atattctctc taaaattatg ngcaaatcaa tttttaaaa atcaaaatct 600
atgttaaaca cattttggca ggggggctat aataaaaaaa aagtgtgt 647
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<210> 440

<211> 248

<212> DNA

<213> Homo sapiens

<400> 440

aaaatctcca tggcagcaag ctcagctgat tggatgggag aggaaattg aggctgggag 60
acctcctaga ccacagctgt aatcttccaa gaggaaaggt acttacagaa ttgccaaact 120
actgtgaaga caagactaaa cagtaacaaa catctacatt tgtattatta ctgtaatagc 180
tgagttgctt gctggttgaa aagtaaggga caacaatagt ttgtccaat aaagatgatc 240
taactgcc 248

<210> 441

<211> 192

<212> DNA

<213> Homo sapiens

<400> 441

gttgactgct catccattag cagcagatgt ctctcgagta gctgaaccac accaagctgg 60
acctgggact tgaggagccc ccttcaacct ctgccaggac gcacgctgga ttagcatctg 120
ctagggctgc cgtaagaaag taccaaaaaa taagtggctt aaacaataaa atattgtctc 180
acagttaaaa ac 192

<210> 442

<211> 369

<212> DNA

<213> Homo sapiens

<400> 442

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tgaagtgatc agaggagtag cagaacagag caaggaagcc agtgtgacag agaaatgaag 120
agatcaatgc cacaaaatta aagagaacac gggggctcgt cattccaaat cccccaccag 180
gaagccccta tcaggagggg aggaggagct cctaggaact gaacttgac gcaggccact 240
tcagctagag aacatttctg aggaacacca gacctctct cttccggga gcgggatcca 300
acacctggcc agacatatcg gtgctgaaca aaagtgcact gggggatgat tttaaatttc 360
ttctttatt 369

<210> 443

<211> 442

<212> DNA

<213> Homo sapiens

<400> 443

atgaggaaac tgagacttca aggggtccaaa tatcttagtg ttcttgagcc aaaggtgctg 60
agtgaaggag acatgggtccc tgcccttgag gagctggcag tcttctggg gggacagatg 120
gtgagcagga gcagtgcctg ccactatgca tggtaactg agctggagga ccctgtgctt 180
cccgacctc acaggcggag cagcctctca ggaacccctt ccgaggcttc cacctgtggg 240
catgctgctt tctcatcact gctgctgctg accttctcc ccagcaacta ccaaaagccc 300
tttatccac agtctaaaca acccagaaaa ataanggacc cccccanaag gaggatgaag 360
agcagtctgt actcaatgt atgatcagta aataataaga agacaagctc ctgctgggca 420
cttagttcaa cagcagctcc tc 442

<210> 444
 <211> 658
 <212> DNA
 <213> Homo sapiens

<400> 444

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gcccccgagg ggggncggna ntnntggcct taaangnggg gggngcncnc ccttnncnc 60
ttgggaaagg gggggaaacn ccccccttt ggggggnnag aaaaaagggg ggggggggcn 120
tngggaaagg ccccttccc tttttttt tnnntagga aanttttaa tnggggggaa 180
aanggccngg aaaaaaang nacnttccc ccaancccc aangaaaang aaaaaanttt 240
ttgggaaaaa aaatgggaaa ngccccttaa ggggaggaaa aattttaaga aaangaacca 300
acccgaantt antttttgca ttggaaggga caccggggaa gaagacccaa gccntggcct 360
taaaaaaga acctggtggc ttttggcan ttgccaggc aaaaccaag cccattggc 420
ctgatggaa attttggac ctgggccctt caagaaactt tcaagccacc gccaccaagg 480
ggaacttctt tttcaccaa gtgggggcac ctttgncca aattaaaaa taagccttg 540
cttgggttat tggcattctt ctggacctt tttctttt acaccttct tcntgggng 600
gggggaaagg gtaaatttca cccccctttt aagccaaacc ttttcccat ttcaaacc 658
  
```

<210> 445
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 445

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gtgacgtacc cacaagaaaa gagctcttat gctctcctct ctccgggatt gctgatatgg 60
tcattgatat tgtggatttt acaaattgaa gattttgga aactctgcat tgactctagg 120
ttccacctca tcattttaca gaagagacag acatgcaatt aagatgacct gcctggagcc 180
cacaatatta gatcatttcc tcatatagta tgaattgac aaagttcaca gaaatggaa 240
catactcaca ggttgccatc aaacaaaaa ggctggctca gaatcaggtc aggagatctc 300
cttgtgagcc catgccacca gagtcttggg tccgacacag agctgtatgg agtcttgag 360
aagtggctgc tcttgcatg cacaagagacc caagagctt gcatactctg acccggaga 420
tcccaatga atgtgtctgc actcaagcaa gaca 454
  
```

<210> 446
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 446

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aagaatctac cataaaacca acagactcct cctgatctct acctgtgctg tctgcctctc 60
tagttccgga cactgagagc tgggtgccctg tggccacctc aagctggaac cctgcaagat 120
caccaagaag actgcatgcc tcgctctagc ctctctaagg gaaagtagac tctgtttt 180
gaaagaaatt acctgatttc aagagaaaca taaaggactt ttttccctt aacattccac 240
tcgtaaaaat gaagtgttga agaactctg caaactctga gtgttttgt caattgacct 300
tttactgtac taagcaaatc tgaagccaca aatacattgg ggaggaaggt atacccttca 360
caaaagatcc gtcacttagc cagatctctg ntgcattgct cttaaataa aagccatttc 420
tggtgatatt tatttattta tttt 444
  
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<210> 447
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 447
 tcaggggtgg ccatgtgacc aggtgctggc acacaggaca ggagagtata caatgtgatg 60
 accccacaag ccaccaaaca agccctgaac cagccaccag gaggactgaa aaagctgaag 120
 tctactataat ctgggatctc ctgtttcagc agcttagtct gtatcctcat caatacagtg 180
 tatctaagaa acttaaaaac ctgtgcttta ctctccatag gctaagaatc atccagatag 240
 ttgtttact tttttttt agcacattac at 272

<210> 448
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 448
 ctccacttc cagcctccct tgaccttcag ttggagccat ttgactggag tatgaccaat 60
 ggagtatata tagagggtct gctgactgga cacatgacca gatgcacat ctctttccc 120
 ctctgtggc aaccacagag gccgcacatt acagagcata acatgaagga agcacagaag 180
 cctgagtcgc tgcttgaagg agaaactccc agggggccaa ataaccagaa aattctacct 240
 tggattttgc ttaaataaga aataaatctt tattgtgtta atccactg 288

<210> 449
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 449
 gagtctctgc attangttgg acaagctctt ctggaattat ctctaagtc aactgtgggt 60
 tgggtaggng gctctgctga ttttcgctg gacttccaca ttggggacga agttggctgt 120
 catcaactct agaaagggtg nggccgnttt acattggctg gtttccaca ttctcaagca 180
 atagagatgc ggnttcccca tgttggcccg gctggncctt gaaancctgc ctcaggngan 240
 ttcacctacc tnanctttcc cgacgtactg gggtttacag gcatganccc cccgtncceg 300
 cccaaggang ggctcttgag anaatttcat ttcttggcc ctgctgaang aangnctacg 360
 ntnatttaa agggcctgct tgtgggaaaa ccacccccca aaagttgctg nnaacaanaa 420
 aaaacctttt tngnangtca ncaanaaaaa ctttncncct ttgnatngg gggcttttg 480
 g 481

<210> 450
 <211> 397
 <212> DNA
 <213> Homo sapiens

<400> 450
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gcttaagcac gagtgtctga aggaagtcct gttccctact gccaacccac gaggcacatgac 120
cacagtccag tcgcaggagc tgctataaca agatgacaag gaggcaagac tgattcacta 180
ctgattaatg cctgttgatc ttcaacaatg ggccattcca acaaatgcaa gaanggaaaa 240
atcactagcc aataacatgg ggatcctatc ctataaacag aaaggaatcc catggaaaga 300
attctaattt tatctattta agcaactatt ggttactcat gcagggtcag aaacagaggg 360
gactatgagt caataaatga tgtaaagggt tatcacc 397

<210> 451

<211> 432

<212> DNA

<213> Homo sapiens

<400> 451

gacacagtga gctcaagaaa ccaccaaaaca canagcanaa acaaggattn gaggcacagt 60
nccacacttt ctagctatga gagcttggcc aagctactta attctccagc cttatattt 120
ctcggtctaaa aatatatggg gcaagtcttg tgaagatgca atgagataat ggatgggaaa 180
gccctttgtg aagtgtaaag caacacacaa atgcagaaat aacaactaac agaaggctcc 240
caactggagg atcatgtgga aaaatggaag aactgagact atcttctggc catgaacaga 300
aggagaaaag gatgctgagg acacacttca aaatctgcat atcctctggt tctctgctt 360
ctctaaaaat tgcaggaata ggtgaaattg agcctgtctg tttctgtaa ttagtacttc 420
atttttgtt tg 432

<210> 452

<211> 416

<212> DNA

<213> Homo sapiens

<400> 452

agatatgaag tgaacctggc tctcactaa accacctccg ggcacatgac gcatcccagg 60
acaccccatg aagagggggc agggcagagc tgggtggggga ctttgatttt ttaattctcc 120
agcactgaca agcatcaag tgcccaggat aacagcacct aaaccaagg ccagaagatg 180
ccatttgcct gatcaactaa aagtagatgg aaagcccaga cttagcctga ctccattcat 240
tggctactca tggctttcct tccaagactg acaaatgacg gaggttcaac ttatatgatt 300
tcctaataca attaaaatca ctgaggggag agtcctcaaa aaaaaaagg nccnnggggc 360
ccanttannt tgggattaan cagggngaaa ttgtnaaaa gggggggggc ccccca 416

<210> 453

<211> 148

<212> DNA

<213> Homo sapiens

<400> 453

gcacaggtgg catgctctgg cggcaagggtg ctctacaagg cctggcaata aggaagggtc 60
cagttactcg catccagtgg tctagagcat gtttgattag gcaactttta gcagtcgtcc 120
tcagctgtgc atattaaaat ggctcctt 148

<210> 454

<211> 457
<212> DNA
<213> Homo sapiens

<400> 454

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tctatgcatt gcctcaacac cagtcattcc tactcccacc cagacaacat catctccact    60
cccaagcccg aaatgctccc tgccatgcct tcgaggctga ggtctgggaa gaagactcta    120
agaagagaga aaagggcacc agtatggaga ccctagaata taaaaagcag acttagcctg    180
tctaactgtt tccttgactt ggccatgata ccaggaatgg aggaaggatc ttcttttct    240
tctctctct ggagaggcat cagagcatgg gccctggctc tgttactccc tggctgggga    300
agttacttac ctactccgtg tctcaagtt tacttatctc taaaaggggt agagtaacag    360
cactcactgg agtggagtg ggtatgcct cccagcctct ccttcagaac taggttactt    420
attccctcac tgcaaggagt ggtagctgcg gactgct                                457
```

<210> 455
<211> 84
<212> DNA
<213> Homo sapiens

<400> 455

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cactttggga ggccaaagca agaggattgc ttgagcccag gagtttgaga ccagactgga    60
caacatagta aacctcatcc ctac                                84
```

<210> 456
<211> 462
<212> DNA
<213> Homo sapiens

<400> 456

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ggaataagac atggacacct ttgagaggcc attttctgc tcaccacaag gcccgaagga    60
aatggaagag gatgctaagt gagggaccca ctggcaccca ctgagttggt atgaagagta    120
tttaaactg aaacatttaa gacacagcag atacagaaag aagcctttct ggagcttccc    180
ttatttgact aaagccagag ctttcagaga gngaagctgc cataaattcc ctctgggga    240
gttctactgc cagtaaggag actttactgc caggaaggag accacttgca cctgaatgac    300
gaattgcata accgaacata atcacaatt gtctgacct cattgtttc cctaaaagcc    360
catttgtctt tccacaaaag gatatttgct tcccataga accctttctc tctctctccc    420
tttcccata ttattggcat ataaattct catccctaac tg                                462
```

<210> 457
<211> 439
<212> DNA
<213> Homo sapiens

<400> 457

```
aacagnatt cttcagtggt ggtctgaaga ccacgggtgt tcttgagga gccaatgagg    60
gaactgaaat ctgtgagctt taaaccgctt gcttgaagac acggctgaca ttgtggctg    120
aatcctaag tagttaatt tccttcaat ggtcaactt gcaactgtta ggagtctcg    180
```

aaaccttttg tgtgaatcca ggagggaaaa ttgtctggca aagtctgata agcatcgtgt 240
 caagagcaca ttgtactct ggatgggagg tgaagggaag agcagcatca tctgtgcagc 300
 ctggtgaaac ggtgtttacg acaggctaca cggggcacta ctgggggatg ctgnctcctt 360
 ggattngtc atatttttaa cccagtggga aattcatagg atcctcttga ctctgtaaaa 420
 actgtgggac aattcagtc 439

<210> 458
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 458

agacctgggc ctgcaagagg aagagaatcg cctgaggaca caggagcggg gacgggagcc 60
 aggccttgag tcagtcctcc ctctctggg caagccatgg atcatcctgc ccagcacttc 120
 tcgtccttga cggctgagtt ctgaaggagg gaaggcaaga ccaaagaga cagatggaca 180
 ctcccgggat gacacagttc acagcaaggc caagatgcaa attaactcc taactctcat 240
 tacaacagct tctacttttg cctctcttgg gttctttcat tcaactcaaca gacatttgca 300
 gagttagctc atagtctctc ttaagtttta gatattgaa gataagcgtt aaaagtcctt 360
 atgattgggg aaccacagc ttatgggaga ggcaagtatt agaggtgatt tactacaact 420
 cgagggattt actgcaactc gagggattta ctacgcaaag tgctgggcat tccaaggagg 480
 catggaagct ctctgaacac canggcagta actgctctgc ccaagagaat ggggtccact 540
 cttgcacctt gaaggaccag ggatgaagaa agtggttcan atgaatttct gaattagtct 600
 gactangctc tgaacctgg cgacaataa atgnagtaaa tattgatgcc ataaataaag 660

<210> 459
 <211> 233
 <212> DNA
 <213> Homo sapiens

<400> 459

gtggaggact ttctatcatc tctaccaatt gatcaattca gaccaagtaa gcattgcttc 60
 aaaggagagt tgggttgggg gtgcatcact ccttagctgg agatacagag aaatctatac 120
 ctacaagatc ctcaaggtgt ccttggttaa aacttcatcc aaggaaactca agtactgctg 180
 gatttngtg actcatntta cgaacnaata caaaggccta ttaactattt aaa 233

<210> 460
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 460

ggaaaccagg aggaattcca gaatcaaaga gaaccgcatt cctctctacc acaaagtact 60
 cacacttggc aaatggcaaa gatttgggtc atcattttt aaacgacagc caagcattaa 120
 agagcccagg cagagagcaa gtaaaagagt ctccgtggtt cctcccagcg ctagtctgtg 180
 gcctcaaca catagcacgt tgacggaaaa attccaaatt tctgggtccc aaggggaggc 240
 attactcagc agtctcagcg gtgacggcgt cagcaggaca agagccattt gctccgggag 300
 gactttgatg ttcttttaa tggtnctgc atctagtcca atagaatga tacggaatta 360

tctttattac aaccacaagg atgtgcaaatt ttatttacag tataaatggt tctttccaca 420
 agtcctagct gtcaacaact ctttattttc ctggagtgac ttacaagcca agaattgnttt 480
 gttttctaag ctctctacct anagaggtaa aataacaatc ttggtaatga gaagacaaaag 540
 aagctaactg ttctgctttg caagcgttcc tacagaccgn accttttaac tgcctagtgc 600
 tggcaactta acatactgta atgagacc 628

<210> 461
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 461

gactgaggct aaggaaggcc ttgtactggt ttagagccc tggacggagc tccagggtgac 60
 atgggccttc ctggttctac caccgacctg ctggggggtt cagcaagcct tcacctcca 120
 cgttggcgtt ctacgtctca agaaaaggaa gttgatttcc atgagaggtg atcaaactgt 180
 gctgtagaag cctcagcgtt tccacagaac attagagtac ctctgccaag cagaattctc 240
 cacatggaga aacctcccct ctactgatt ttatatgcca tgcattgcaa cgctctgggg 300
 aagatttttt gcttgag 317

<210> 462
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 462

aacatataca ttctggttcc aacatagcgg cagccagagc ggctctctta aagtgaagt 60
 gatattctgc ttctctctg cttaaaacct tcagatctcc ctatctccct aaaagcaaca 120
 accaaagtcc ttccaggggc tacatgaaca cctgcattct ctggagctct ctatgactca 180
 gccctcaatg cctacaatac tcattgcatta agaacatatt gattgggtat ggaaagtctc 240
 taaatctct ggtccacgct tttagcaaca cgtctcaata tattctactt ctacagatga 300
 gtaacttc 308

<210> 463
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 463

gtgagcaaac aggtttccag gcattgcatt tccacgattt gccaaaggcca acaatacact 60
 gttcaacca acagttgttt tccactgaaa tatacaaacg attgaggaca ttgacaacat 120
 agtcctttc tagaaagatg gccatgacat cgctgtgatc actgcttaca ttccacgcta 180
 cctgatttgc atcatgtaga tgcgctgct gtgacattga tagcctgtga ctccccagcc 240
 ttgtgaatca tgcagcgca cataatgtgc atgaatgaaa tggagtgttt ttaggatggg 300
 atgccactaa aatcatcttg ggtaatact gtcatctggc ggnttccagt gtctggacat 360
 ntggatgaat gatctgcttg agagcccncc aaatantagt gggaggcagg ggatcagctt 420
 ttttcacac cctcttgagc tgctgtaccg ngcttattct tctc 464

<210> 464
 <211> 213
 <212> DNA
 <213> Homo sapiens

<400> 464

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ctttgaaaat ctaccattcg gcccttttag tctttccggc tgatctttcc catccacaaa    60
cagatgttgc tcactggatt cagcacttcc atcaaaatcc ccaaaagcct ttatgcttag    120
aaatgaacag acatcaaaaa ggcagcaact gtctcttta ctgccatttc ctcttctagg    180
gcctgtgaca tgacaaggat aatgcaggag gtt                                213
```

<210> 465
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 465

```
aagccagagg agaggggaaga ggttacctcc acatctctca agggctggga aattccagaa    60
agtggtctca gggaaatgggc agccacagga ctacagacccc agaaagtgcc tcgaaccccc    120
ccagcaccaa gagagtgtgt gaaccagtgg ccccgctctg tccacacttg gaatgtctgc    180
ttaaggaaaag atgtttctgg ctccagctct tccacatcct gcaggtcaaa acagcttcca    240
tggggaagac atggcctggg acggtgccaa tgggagatgt atttcttgga ctgctgaga    300
aaggctccat cccactgatg gatgttggct gtgctggcag ctccgcataa tggaacactt    360
cgcttgattt ataaaggacc caactgtc                                389
```

<210> 466
 <211> 582
 <212> DNA
 <213> Homo sapiens

<400> 466

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taacctcata ggtgctgggt tgttctttat caacttgggt aagctgagga ttgtcccaaa    60
aatcccaaca ttctgtggct ctgaattaga aatggccaaa gagacatcta cctgtgtgtg    120
acctggaagg tacaggtgaa gcaggacaac tgtttctgaa gctctttaca cagtggatca    180
cagactaaca aggaggtgtc agatgggtga gcagttcagg atgagacatc ttcttctct    240
tacctacttc atcattcacg ctcatctcaa tgttggctat aaggtaaagg gaagcacgcc    300
tcaagtgatc atgcaacaaa ctccagtga gacactgcgc atgctctctt ccaagtgcgg    360
gcaggcagct gtgcatgtgg gcagcccacc ccaaaggaag aagaatcagg aaaggagggg    420
cgcaagactt cggacgtatg ccaacgcata aaaccccaaa gtcaaaagct caaaccacac    480
atctgtcctt caagatgcct accttgcccc ctttaagaa gtaatttact ttctgtcatt    540
nctgtcttaa agctttttaa taaatgttca ctcttgcctc tt                                582
```

<210> 467
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 467

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gtgcagccga gtctcctggc ggagttttaa gagcatggat tctggcacca ggatacattg    60
gtcacatctt gactgctgct tacaagctgt gtgctgccgg acaagttcct cgacctgtct    120
gtgccttggt ttctcgtcg gtgaacagg ggatgggtat atcttctcac gggattgtca    180
tgagaatcaa cacattccca ggggtgactg ggaagagggt ccgagactag tgggccctgg    240
agcagggtgc acacgtgcga ggagctccag ccctcaggaa tagtttggag ccacgtggta    300
ggcaggaaat gattcgttga ataatggat taaaggggtc ac                        342
```

<210> 468

<211> 206

<212> DNA

<213> Homo sapiens

<400> 468

```
tcaacatgcc cgagtgtgt gaacgttatg agagggcctt gttgggaaca cgtgctcctg    60
ggaatcagcc ctccctctg tctgttccc actcctcccc gacgatgctc ctgctcagaa    120
cccactctc acctcagtga agcaacgcag cgggcaccct gtggacaaag ctggatattg    180
gctctgaata aaagcgaatc atggggg                                206
```

<210> 469

<211> 926

<212> DNA

<213> Homo sapiens

<400> 469

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tcaagaaact ggagnncann gccgtcnnac tanncncng canngnacnt tgcenntnnac    60
aggaaacgga cnggattat attanaacta ttcaatagca agacactgca cacccaatgc    120
gagaatangn cgtcaattg ggagacgaaa aagagtgtga aatangcaa tcggcgaaga    180
gtctacatca ntggacacng ctntgagag nnnnggnana aagggcctta ttccggggt    240
tattggacct ngngagcaac aaaaacaaag aacaaaattc cgggntngct ctggatgcc    300
ccccntngta tccgngcgt tgtcatcgca aagngggccg ccccggggtc tttttgtca    360
aagaccngaa cttgtcccc gtgcccttga aatgaaactg caagcggacg aagggccaaag    420
cgcnggctta tccgtggctt gggccaccga cgggggccgt tccttggcgc caacttgtgc    480
tcagacgttt ggtcactga anccggggga aagggggact tgggcttgc tttggggcc    540
gaaagngccg gggngccaag gaatctctg gtcattctc aacctttgt ccttgcccga    600
agaaaagtat tnccatcatt gggcttgatg ccaaagccg ggcgggnttg cattaccgcc    660
ttggatcccc ggcttacctt gccatttcg aaccaccca agccgaaaac antcgtcatt    720
tgaagccgaa gccacgtaac ctttngattn gnaaaccggg ttenttgggc cgaatcaang    780
gaatgaattt ttggacccaa aaaaagcatt caanggggct ttgccgcca aaccggnaa    840
ccttgttcnc ccaagggctt cnaaangggc gccncattgn ccccaaacgg ggnaaaggaa    900
ttntccncc nnnngacccc attggg                                926
```

<210> 470

<211> 348

<212> DNA

<213> Homo sapiens

<400> 470

agaactgaga tcccatatga agaagccaaa ccatactgct agagacacac ggctcagcca 60
acaagtcatc agtcagtcic aaacangact tttgagtga gctgtcttaa aatatcaatc 120
cccaggacac tcaccaaca agatgcagaa tggaagcaag cgaatgaacc tagcccatat 180
tgctaacca gagaatcatg aagaagtaac atagttgtt taggtcactg atttcatag 240
tagttggtat tgcaacaatg cgtaactaat acagcatatt attactaaat gtttaaattg 300
tacttaata taagccaaaa taaatgggtt aatccaaaaa aaaggcca 348

<210> 471

<211> 406

<212> DNA

<213> Homo sapiens

<400> 471

caactctcc atctttcatg aaaacatcaa gaggcacagg acgaagatca atggagtcgt 60
aagaagattt tggatttgg tgtgtggcct ctgacaaaac tgttccctt gtttctgata 120
ctccttgaaa cctgcagtt caaaacctac tttttggtt taagatcaag aaacggaggc 180
aaagagagat taaagagctt gcccaattt agaaagctag tgagtgggac agctaagaat 240
tcattcaca cccgacctg gaactgatgc tcttactct tcactctct gccttccat 300
gatgaggcag gtacatccgg ggcagtattg ctgtctaggc tgttgttaca ttatggtgaa 360
agactaatc caacatgaag aataaatcaa aaatttatta attatg 406

<210> 472

<211> 459

<212> DNA

<213> Homo sapiens

<400> 472

tcacctggg tcagaagct atttctgtaa gctgcatcag ctggacttgg accatatggc 60
ggaggcagca tctacattg atgattcaat tgaccggcg gatgactaga tcgttttaa 120
agccctttgc gttctgcag gtcgtttgc tatacagat gcaaaaggaa gcgctgtagc 180
cacctcaaat cgccctggaa tgctcttca aatgggctgg actccgtgat ttgtcaagga 240
aaattggaca ttacctgga aagtcttcc taaacctgg gccagatgt ctgcttgaca 300
gatgtccctt atgctgttt caatttaaag agtgtgtta aaagactttg gcatgattta 360
ttttantt tggcgtattt ggtggaagt ggaagggaag gggccagaaa attatnngg 420
caatttaaaa accgtaacag atttgcctg gcctctggg 459

<210> 473

<211> 435

<212> DNA

<213> Homo sapiens

<400> 473

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aggaccagc ccacatctgc caaccaccg tgcctctgc ttcatgttta cctgcatcc 180
tttactga tgccttcaa tatccgtgtg tgcacgggaa cagtgggtat gctgccaatt 240

taaagaacca aggcctcaga ggaaaggaaa ctcatgcgtg cccccaccac cgactccccg 300
gttcctgctg gttatttga aaagttattc acaggaggaa gagaaagagc cttcgtngn 360
gattccctgg ttacattacg ggggggggtg aaccaaggtt ctctgggcag cttctccac 420
catctgttcg cactg 435

<210> 474
<211> 238
<212> DNA
<213> Homo sapiens

<400> 474
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ccatgtattt gtctgcactg caggattttg gacaattac ctttttctc tctgccctcc 180
attctctca cctataaaac tgtgacnata actgtattat taaaatgttt aaatcggc 238

<210> 475
<211> 447
<212> DNA
<213> Homo sapiens

<400> 475
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attccaacaa gatggcacac caccctta caccacattg gtgaagaaag ctggatgaag 120
atttccaaag aaagcggccc tgggtggagt gggcttcag gctttggcaa gaatctggaa 180
ttcccttgat agcttcttct ggagtgcact taaaacacan atttattccg ngaaaatcaa 240
ncagcatcac anatgncat cgagggactg acagaaatgc tgcattcatg taccacattc 300
acggaaattt tgcactattt attgtcatg agggccgaca tcaatcatgt gatagcaaga 360
aatcatttgn tcatggtaga atcccctagt tggcaaaagt tgggggttat cttatcattt 420
gacacagga agcccatat attctga 447

<210> 476
<211> 452
<212> DNA
<213> Homo sapiens

<400> 476
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cccttactg gacagaagag gaaactgagg ctccatctgc atgacgttc cagagtcacg 120
gcacaaattc atggaagaag cagcaggaaa ctacgttctc cagtctgggt ccaatgtgtg 180
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gtcccaactg tcacactgc aggagtgang gtttgcntga aactggataa ggcctccatt 360
ttnggggagt tgaattgtct ctgtagcct aaaatctana ttttttccc tctctgctc 420
tcagngaacg gagaattcca tctcgttaca ta 452

<210> 477

<211> 190
<212> DNA
<213> Homo sapiens

<400> 477
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atcacatcat gggagcctag ctacagaca ctgccaatgg aaattgcaga aatagatcaa 120
ctgcaaaagg ttacataggg gacccgatg ctacattaac tctctgtgaa taaattacat 180
gtaaaatttg 190

<210> 478
<211> 54
<212> DNA
<213> Homo sapiens

<400> 478
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<210> 479
<211> 300
<212> DNA
<213> Homo sapiens

<400> 479
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ctgagaagaa tgcagtgtct ctccctgca caggatttta acttaatatg tatgctggga 180
ctggcaagtg cccaagggac ccattctctac ccattggctg tcagccagag aacagcctgg 240
tctgggagtg gtagatgaat ccattgggtt ttagctcct aaataaaaag ttcattgtc 300

<210> 480
<211> 444
<212> DNA
<213> Homo sapiens

<400> 480
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cattcccatt ggagagatta gaaaaccaag gaaagaaacg gaggtcttc atggtcgata 120
agcaccccg ggccagtctc ctgacgtcca ggccctgctg aaacgagtct gttctcacgg 180
ctgcttggtca ggggtcaaac gacagcacct tggatccgtt gtggagaaca aagagcta 240
tgaaaacatc tgggctgagg ttccaact ggcttctcat ttggcccgg ttccaagca 300
gtcaagctcc actgaaacat acactcccta atcgattgct gtctcaaca caaaccaatg 360
gttggttgg ttaagtact ancaccaggg aanaccctcc atgttctaag tggaatgttc 420
tgtcgaaaag ctgcaaaagt gaca 444

<210> 481
<211> 187

<212> DNA

<213> Homo sapiens

<400> 481

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cctcccaaag caagtctctt ccctctggca gcagagaagc ggattttctg ctcaacctgc   60
tttgatcacc aaatgagtca gggagaagaa catggatgga aatatcctca gtcaagaact   120
tcacaagcac cagttgcctt aaccaggggc tctagaaatt ttctagaata aatgcttctc   180
aatttgt                                     187
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<210> 482

<211> 380

<212> DNA

<213> Homo sapiens

<400> 482

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actgatactg acagaaaaat catcacatgg accctgctct catgctgtct accattcaac   60
aggaaaaataa aatatgctgg actccacttg gaagaaaatg tgtttatgcc ttttaggaa   120
gtcgtgtggc agcccatag agagttggct ggggtctcagc ccagggccct gggccatttc   180
tgccaccag aactcaggga gacagtctgc caccctcatg aggggacacc caactgacag   240
ggtacctgca gttccctga gttcccagg tgctgcaag tattcccat ctcttagac   300
ctagccctt tactgcaga agcctgctta catttatctg aaaattttaa aagttaata   360
ttaaatctat gatgtgtgtg                                     380
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<210> 483

<211> 398

<212> DNA

<213> Homo sapiens

<400> 483

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acgtgagtc aatgaaaag tcatagttgg agattcctca tccggactgt agaaaaggtc   60
atgtccctaa ctccagaatg ccaatgataa aggacacgt acaggcatgt tagaaagatg   120
gagaagtcag aggaagatgt gcacaaagt aaatcgctct gccctttcta ctatcagatc   180
atcaccaaac actcgtggga tcactgag aaggatcatc caagtcaaga gctgcagaag   240
aaatggtgca catattcaag agtctcacct ttagccttc ctctacagca gaatcactat   300
gctacattaa ttctcttc atctgatgac ttctgagag cttttaatt tctgcatctc   360
ctatttctta cccaaggcat taaaccagct ggcagatt                                     398
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<210> 484

<211> 425

<212> DNA

<213> Homo sapiens

<400> 484

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atgatgggag gcaatgagga tcaggaagat gaagtgaat gtccaatccc ctgaacatg   60
gcaactctgg actccctgtc cagtgtctt tccactctac catgcactag ttaactttt   120
atgactgcag tgcaaattct taccaggaat cctccaaagg taciaaattat gtccttcaat   180
ctgttctct ttgacatgcc ctctcctag tctgtgaagt ctgattggac tgggacctat   240
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ctccccactg gaggaacctg tggggccatg agaaagtat ttttctgaa aactcagttc 300
 ntntntgna aaananaaaa taangttaac ttaccaagt tgttgggagt accagncctc 360
 aaccttttg gccccaggga ccagttttgt aaaaaaaaaat tttccacgg acccagggtg 420
 gggga 425

<210> 485
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 485
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 ctgttgctg tccaagactg gagcatctta ggaaatggct cacctggagt aactgattga 180
 ggtccagtca ggcatgtgag gacacagtgt ttgcccact ggaggacgaa ggaacaaggc 240
 accatcttg aattggagac cagagccctc acaagacact gagcctgatg ttaccttat 300
 ctggacttc acagcctcta aaattg 326

<210> 486
 <211> 226
 <212> DNA
 <213> Homo sapiens

<400> 486
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 gagacctgca agggctcttc tcacacctgg gaacatcatg gtgacattgc atctgccacc 120
 agctccagcc tcaggaaggt agcatgtgag gacaggtgtg gctagtatc atcccagcgc 180
 ctggttaagg cataataaaa atcagatgct gttggcctcc catcgg 226

<210> 487
 <211> 199
 <212> DNA
 <213> Homo sapiens

<400> 487
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 aaaaaatgct gtgtatccag cttccatcac ctggaatagg atatccgtga taagcaaatg 120
 aaacagaata aactgaata cataaagcca ttagcattt tctgatctcc ctcaaaggag 180
 tctactgaaa tactgaagc 199

<210> 488
 <211> 467
 <212> DNA
 <213> Homo sapiens

<400> 488
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aattttattc gagggtgaaa gatgtggcca ctgcctcatc tggcccacaa aagccttcca 120
cgtggccctt cctccttccc tctgcagcca cgcacacagg atccaacgca gaactgggtg 180
gcctgaggaa aggatggagc ctaagatgga aagagtctgg gtcctgaatc ccctttaga 240
agaccgctg cttaaacagg cactgaaatg cccagggagc aagaactgaa acacctactg 300
tgttcagctg ctgagattct ggagtggcct gaagtagcag tcaacttgct ttgcctattg 360
cacatataca tgctcatatt taactccaat tacttgattt aacaacactc tacaaaagat 420
gttttgaca tgctaagaaa aaaagcaatg accaaacaag tacccca 467

<210> 489

<211> 401

<212> DNA

<213> Homo sapiens

<400> 489

gttcaaggaa cacattgtt cctcaaaaaa cagaccggca gctgagagag gatggcaatc 60
ctgatggatg agaaaaagaa cagagctgtg gacacctgag agaagactat aggactcaa 120
acatcaaccc atttcagttc tgatgtcagc aaggagagaa ctggcaaact gggccaaccg 180
tttgattgac acatagaagg ccaactgggt aaaatcatta ctcaaagact gtatttcag 240
tgcactctcc agttgtatct ggtcagggca tcatcaatg ctgtggatga agcttgctgt 300
catttagcaa aatgtcatag tgatcactga ttgttgctt gtaatagta atagcaacct 360
ttctgcaat gctataatta aaaaattgg ttttgggtt t 401

<210> 490

<211> 469

<212> DNA

<213> Homo sapiens

<400> 490

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ccaaacaagg tacctgctgg actcactgt gctgctgat ctttcagggc agctggggat 120
tgtgggcagt tgcacaacct ggaggctggc atcatggggc catttaggat tgaatctgaa 180
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gctcttggt gctttctca ttgatgctt tggatgggtc tggtagaatc tgttgacttc 420
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<210> 491

<211> 304

<212> DNA

<213> Homo sapiens

<400> 491

gagctaagga ctggctcaat tgactataaa gaatcgagaa tgcagctga ccaggcaacc 60
aggagacgct ttctgactt ccactatgca cgtgggctgc ataattgtgt ctgtgaagta 120
atgaagaacg tgcttgctct gtaacatcca aacgcgtggc caccattcac agatagtgtc 180
ctttgggaaa ggtgtgggta tagatgggga atggtcagtc ctatgaatat ggggctataa 240

gacagcaagg ctagaaagta tctgtgcttt cattttttaa ttttatctat tttttttt 300
 tttt 304

<210> 492
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 492
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 gagcagaaag acagaagagg cctgggaccc aactagcatc atactactgc ttcacagcc 120
 ctatgatgact gcctacctcc ctatacttcc ttacaagaca aaataaactc cgtatttgtt 180
 t 181

<210> 493
 <211> 158
 <212> DNA
 <213> Homo sapiens

<400> 493
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 gccatgataa ggccatatct tgcaggaaga caatgaagac cagaaagtga gacctaagc 120
 tgatgattcc atgtagtaat gagtcaaatt aatgatg 158

<210> 494
 <211> 53
 <212> DNA
 <213> Homo sapiens

<400> 494
 tcccctacca gccctcacc caacccctcc ctttccctt ttgcaggag aca 53

<210> 495
 <211> 493
 <212> DNA
 <213> Homo sapiens

<400> 495
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 cttcaccatc tctcttcctt cccatgttcc agaagattct gcataatgaa aacactgtaa 120
 tctctcaaga aatatctcat aaagagtgcg tgagaaaatc ccttctcccc agagcttatt 180
 tctctcgcat ttaattctg aatgaaggga tcataaaagc atatcaagat ccattgtgcc 240
 ccacaaagga cattctgagg caacctgaat gccccccac ccacgtgaga tagcaagtga 300
 ttttaaggg atggagtagg ctataaaagg gagtactgag gagacaaaag gagtaaatgg 360
 aagaagggaa aggaagggag aagaaaaagg cactgaggct ggcgtcacag tctgtatgg 420
 aggcagagtg aatggtgcaa tgaaaagtc cagaagggtg aatcaganga cccatattta 480
 aatcttgaat tcc 493

<210> 496
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 496

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cttttgagc agctatggct acttagttca aaatggaaga aaagctggat tgctgctatt 60
acaatccctc tatcctgtgc gaagaaagag ccttggaact tggaaaagaa atttaaagca 120
accacaagct acacaacat cactatgaaa taaacccttt ttgtgtggca tgaaatcgct 180
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ctgctaagtc taggtggtta ggcagctgtt catcanaggt agtcgcaaag caaagtttta 300
atgtgaactc tgataagctg gactaatgtt tttggggga angggtntgt ttgaaccac 360
ctggtnttaa aacagcttgt tgaaaanccc tggggtaaac atattgaaat ggctgggggg 420
aaagaaaaat gaagcaaagc aa 442
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<210> 497
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 497

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tcagaatgga acagccagat ctgcacaaac aaccaaggac ttctcagggg cctctgctgt 120
aggagtctcc aagaaagaac aagctgaata ctcaactcag aatcagctga agacttgca 180
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ggcagccaag tgaaagagtt atcgaccatg tgtgtgctga gttcagtgc gcaaaccaag 360
ctgaactgag acttgagacc tcagcatcca cccagagtct caatctagca atctgctaag 420
ggaggggtga atcctgtact cacangccca aacaatctgg caggcacant ctatttcca 480
cttctacgga acatgtggga gttgngttat taagcacggn gacagttcac acagaccgga 540
aaggtt 546
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<210> 498
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 498

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ganggggaac cagaagccga natgggtcac ttangccag aanccccggg aaaactccgg 120
gggaatcttc cagctggctt tctttgcaa ggggaatctt ggaaccccc atttggtgc 180
cacattggag gataataaaa gttccacaa ctttcattc aaggatgacn atgaaagcag 240
ggggcccaat tgtgaagtac tttttctgaa gtcccaagaa gtggacaact tgcacaagtg 300
gaaaggnnga aacttcgtnc ggaaatcccc cttattgaaa ttttaaaaga accgngnacc 360
gtggaaaagc caacanggtc aaggggagac tggcantct tctcgatgn ccatggggg 420
gttaatcntt tganggttct tgacanccta ttcagnaaa aaaaaaatg ggaatcttt 480
genticacaa tggttttcc tnttacacc cttaaactct tcnccttta ngttcaaaaa 540
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anttcacntt tttanaata aaaaacttcc t

571

<210> 499

<211> 509

<212> DNA

<213> Homo sapiens

<400> 499

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ggggaaccct tgcagctgtt ccacctgaat agtggagaga ggtgtgtggc cacgctgaaa 60
cctgaaacca taacgtaaga gccaaggga gactggaaac tctacagcca tgaactaaaa 120
gcagcgtgtg tcagccgcag aatcggataa cacaacaaa ccacaaatgt gcctgccgct 180
caggctttaa agttctacag tagagcagga cccactgtga cttactttgt gtgatggagt 240
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ntcagatttg agataaggga ccccttcacc ttgactcttc ttgcggcat gaactcacc 360
attaaggtgc tcactttcta tncatagnc atatcatcag ccncttatat ttaatangca 420
tgggggggtg gaattgtctt aatgtaaang ggggaatcaa agctttatct attaaaaaca 480
tgggttgnaa gncagactgg gaagacaat 509
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<210> 500

<211> 475

<212> DNA

<213> Homo sapiens

<400> 500

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agacacagag ggggtgacttc aaatgatcag tccaagagtt ttgcttgtga gaaggaacat 120
aggaaggtag ccaagtatga catggcttcc catagcccgg ctttagacac cccaacaccc 180
ctacaccac atctccacga acccacacac atcagaagag tatgcagctt cgctgggct 240
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agacctcang gccaggaggc ccaaaaaagc tgatgccttt gggtactgg ctggtgncct 360
aaagggcatc acacacangg gtcaagtac tttgtgttna aggcccttnt ggagtaaaag 420
ccatcatctt tntgtcccc tncagtaatt tactaacaga gatggagggg accca 475
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<210> 501

<211> 511

<212> DNA

<213> Homo sapiens

<400> 501

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gcccccttcc aatactacag gagacttagg ttctaataga acaaatgatg tataagaagc 60
agcttgaaac ctcagaatgt aaccacaaaa ccacaacagc tagaagataa tggactctgt 120
tgaaacagca gatttcctg atccacctca cctgacgtgc gacaggggtg tggcttgtct 180
cttcggtcac tgccactgct caaacccctg aggggaagggg gcgcacacag atggatgaat 240
gcaggagccc aagtggaaag tgttctccgg gtcccagga gacattccgt gtcataaaaa 300
acaggaccaa aaacagatga aattacttcg aaacaatcct tgaatgattt agtgtgtttc 360
ttgacaaagg gaaagaaaaa agtcatttgt ttccctgtc atgagcgcca gaaaggatta 420
acgtcatttt tgggcaatgg gagaaaaaaa tgccaacat ttgnttacag tcacgtcaa 480
```

aacccttggt tgccaanttc attttctaaa a

511

<210> 502

<211> 506

<212> DNA

<213> Homo sapiens

<400> 502

gagaagacac aagaatttgg agacagcaga ggatacagag agtcagccaa ataaactggt 60
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gaaggctcac tatcaatact gttgggtccgt ttctctgga ggagaatgtg tctctgctgg 180
ctaaggcttt ctttatctcg tcccactcta ctacagcctg cagaccacc caagactgag 240
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ctcagccaag aagaatcagg gagcacaggc acacactcac catgctgaac agacagcgag 360
gaccacattt ttattatctg attcctattt gaccatctga tgtgcaaatt ttacctatca 420
tgggtgcctt gctccagatc taagtgagat cagatggaat ggaggcttca tctggtcntt 480
aaggaatctc aagttttact gatcta 506

<210> 503

<211> 499

<212> DNA

<213> Homo sapiens

<400> 503

ataagaaaat ggaggtcaca agctggagaa ctcttgctc aagttgcata gctaataagg 60
gacttagctg ggattcctgg ccagcagtgt ggctccaggc ctggtttcta acttcccctt 120
cttggcaacc accttcacag aggaatgcaa gagaagcccc ccaacctgcc ccattccag 180
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cactgttcac caacaaaaag tgaatctatt acaacgcaca tccctgcttt gctgttttta 360
tggttgcct gtggaaagca gggctctgtag aagcgcacta agaaaaagcc tgacagagat 420
cccagcgacg nticanatca gaggagaaaa atctgtccca acctatccg ttggangca 480
ggggggaagg ggtcttttg 499

<210> 504

<211> 471

<212> DNA

<213> Homo sapiens

<400> 504

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tggatacagg ccgggatgct acaacttgc ggttgcctca ctctagatgg tcaactgtcc 120
gtcccagag ctttggttc ctcagtctgg cagatcatca ctgatgtcca ttccttcag 180
gtgtttagt ctaggccag tctgagttg ttgagtgaga aagtaggaag agtacgcagt 240
gataacatga ggagcagaac agaagactct ttgtgtgac ctggaacca aggtcatcat 300
gctggggcag agtgtggata ggaggcagaa gggactacat ttcagtacga cttattatat 360
ataagaaagt gttattggct gggcaccgtg gctcacgcct ataattccac acttttgaa 420

ggccgaaggc atgaaggatc acctgaggtc gagagttcga gacctcgaaa a 471

<210> 505

<211> 499

<212> DNA

<213> Homo sapiens

<400> 505

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gtgcacagtt tcaacagac tgctgaatga gaggataaag gcattaagga ggaacagccg 120
agcttttatt gagcaggact gaaaggggtga attggagaga ggtgaagctc aagagcagga 180
ggtggaatga agttacagac actgagaaga aacctgtgaa ctctagtgt gaaagaccaa 240
aaggaaactc ttgataatgg aagacaagat gcagcctgtg tgtaagggga aggccagtag 300
gaagcagga gaatgaatt gttgggaaat cagtggagat ataccatagc attctctc 360
cccacggcct gccagtgca ccaggcacac taatcagcaa tgttctcatt ctggaggca 420
ggacctgtg ctgtgacaat tgaggctggg ggtganggca tgctgatgaa actgctgcca 480
tcccaaagc ctgcttgt 499
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<210> 506

<211> 335

<212> DNA

<213> Homo sapiens

<400> 506

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gattctctc acaactaata ttgatctcc gaaggacaaa tgaatgagaa gcctcaatga 60
cagcaagaga aatacacaaa tgtctgcac acaaaaacac agcaggcaat gcgtgcctct 120
tccagacatc tctaaaagt cccaagt tt aaactgaaga agggctgcta gaaccaacgc 180
tcttaccaa tctatttcta gttcactggc taaaagtgg ctggagatac agtgaaggat 240
tttgacttaa caaaaattg actcaggaaa ggaaatgtct ttttggtgta aacaggtaga 300
ctacaaaagg tattaaaaac actgttgcta cacag 335
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<210> 507

<211> 375

<212> DNA

<213> Homo sapiens

<400> 507

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ccactgatgc cacctgagcc cggcccagga gcccttggg agctgagcgc agaaagaaag 120
cacggacaca cctactcctt tctatctct cactcaagt caccctgtc acaggggagc 180
agccattct tctgatggac cacagatgct ccagtgccag aagatctgca gtcccagatg 240
agcagcagca gtacaagata catttccac tatgtaatcc ctccctctg ctaacagttg 300
attcactctg gggtagacac tggacctaa ggtgtcatcc atagcttng aataaattaa 360
aaagctttaa tgtct 375
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<210> 508

<211> 508

<212> DNA

<213> Homo sapiens

<400> 508

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gactgaacg aatttgaac tgtccagag ctattgttc tcacctgtg gcataactta   60
ggtagtaggg caactccctt acccttgctt ggactcttac tatcaaagcc ctccattgat  120
aaggctagg ccgaccacac cctaaagcat ttctgtatg tatggattg ttcttacct   180
atactgaag aatggcgctg gtgaggtacc accttggga gaattgagaa catcatccct  240
taggtgtgtg aagtgcaca gtaggaagac gggcagagaa agagcccctg ttccaagctg  300
gccgtcattc agctgagaag acggcttcc tggaggctcc acgcacacca tgccgncgca  360
ccctctcag ctgatctgtg gccagctgc ctcacggcaa taccgagca tgtttatat  420
aangcttca aagctgctgc tgctgctgt gccactctg cagtggctat acctggnctt  480
taatgntct gctanacaga agcatcat                               508
```

<210> 509

<211> 491

<212> DNA

<213> Homo sapiens

<400> 509

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aagccattca acagtggccc gttcccaaaa cagtgaggtc tgcgcgata ataatgtgg   60
tggctctga tcaggctgaa ggtgaacatc aacaacagca gagacaatct agaaaaactg  120
ccaggatgat cagaaggaga ggtggcaggg ctctcagga gtaagcttg ggaacactga  180
ctgcaagctt ttaggggaaa gcctggcagt acagaaagga ggatgaaaaa tagaaaaaat  240
ggatttgaga ttagctctta cctctgggga cagatccac aactcctcac ataaaagaga  300
tgccagaagg agagatcaag gtaagggtat taccagaga gactcaagac agtcaattt  360
gatactctta aaaaatctgt taaagtcaca cagttaatgg cttaaaaaat gatggcccct  420
ccccccactc tagatttaga tgaaattgng gtgaaatcct gagctatctt caatgaaaca  480
tgtcttcaaa a                               491
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<210> 510

<211> 507

<212> DNA

<213> Homo sapiens

<400> 510

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ttattatct ctggctctct ctctgtgtca gcatccaagg agctttcccg ttgtctggtg   60
aaaggcagcc tgggaatgaa cattgttagt tctatcttgg cttcattgg agtgattctg  120
ctgctggtgg atatgtgcat caatggggta gctggccaag actactgggc cgtgctttct  180
ggaaaaggca ttcagccac gctgatgac ttctccctct tggagttctt cgtagcttgt  240
gccacagccc attttgcaa ccaagcaaac accacaacca atatgtctgt cctggttatt  300
ccaaatatgt atgaaagcaa ccctgtgaca ccagcgtctt cttcagctcc tccagatgc  360
aacaactact cagctaagc ccctaaatag taaaagaaaa angggnatca agtctaact  420
catggagaaa aaccacttgc aaaaacttct taagaaaang gctttattg ctacaatgat  480
ttctaagctt taaaactggg gttgagt                               507
```

<210> 511

<211> 449
 <212> DNA
 <213> Homo sapiens

<400> 511

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gaaacaaact gagaaaacac cagacgtggc gacatctata actttctact tatatgctca   60
tcattatgtt agtgtcatgg accttaacag ttctgtctgc ccagaccact ctccttcctc   120
tgaaaacgga actcctagtt ttctgttaa taccctgccc ctctggaccc tgtggttcct   180
atggcagccc ggtttccaga tgaaccaatc ccgtagtcca ggagcagtca cctgacccaa   240
gctgagccaa tgagaggtct accttgtgca agttgatgcc cgcctttct gccagaagaa   300
tatcccgac ccatcccttg gtccagacc attcctgaag gccccagcag caagngtcat   360
gcctctcttg gcttggtaa gttggccct ccttgatttg ggggaagcca atggatcatc   420
atcttgatt tcagtcactt gccatcact                                     449
  
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<210> 512
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 512

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tgtgaattct tcctggagt gaacctcttg gatgtggaac acgacagaac caatactggt   60
gaacaacagt cctcaaagca aatgatagtg ctacatacaa aggaagttgg aatggatatt   120
ggtaagcaa aagcaatgtt tgttgagcaa actcagcctc ctcatctgtc tatgggtcta   180
agtcattctt tctttctg gactacacta ttctgactcc tcaaaaaga cctttggtca   240
ctttgatggt taagctgtt gaatgctgca gaaccttgac tcaccacgtt tactggagga   300
gccacaaatc catgatgagg aaggcaagnt tgcctttact ttacacagnc anactcctg   360
gaaagcgggt ctgagacaga gattggcatt caaggagtga atgggggagt ggcagagggc   420
tccttggtgc aaccactgaa gggaaaaact g                                     451
  
```

<210> 513
 <211> 198
 <212> DNA
 <213> Homo sapiens

<400> 513

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gttgaaatta aggagccag caaacaagga cgttgcaatg gcagttagaa acaacagttt   60
tgaaagggca gatgaaacag actcgtctaca agacaagggg attgttgaaa agccctccac   120
aacaaggaa atgaactcaa atccctaacc tgcggggcgt tccagcaacc ctgaggccaa   180
aaataaagct ctctgatg                                     198
  
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<210> 514
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 514

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gaccactagc tctgggggaa gccagctgct atgctgcaaa cagtcctagg ggagaggaca   60
  
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atgtgggcag gaaataggcc acctgccaac agccacctga atgagctcag aagcagatct 120
 tctggcctgc tcagcttcag atgaatgcag cctcatgaaa gaccctgaga caaaaccacc 180
 cagtaagggtg gccagaagga tcacctctcc ttatttatgt atatggagac ccatgagaaa 240
 aatagggaaa gagcaattac aatggcaaca gccaactgaa tccttcacc cactggattc 300
 ttigtgaac tgctgcagaa gctcattcat gccttngat aatnccana caaganatcc 360
 ctgcctctt ccttacgtaa gatgtctgt tgggtatgaa gcaagaggtc atactgcaa 420
 ttgacaagcc catgccatac caaagagtat gtgtactgca a 461

<210> 515

<211> 658

<212> DNA

<213> Homo sapiens

<400> 515

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 cttttingaan caaaancaaa ngtcgcccaa cttacaggnt ccttctctt caaangaagc 120
 caaaaaacct ggaaaaattt tggtaaaagg aaaaataact ctttcaaagg aaaccgcaa 180
 gccggatttc ttggaatgg ctggattta ttattcaagc cggatttctt gaatggcccg 240
 gattattatt caagccgatt ctggaatgg ctggatttg gtgtcaagc cggatccttg 300
 aagatcaaga aagggccagg tactcttggg ctacaagct tgctccctt acaaaccctt 360
 gcaaaccttt atttgccc aaggtaaaaa aacaagccgg ggggaggaaa aagaaaagcc 420
 cccaaatctt aagccccggt cccaaaatca ccaccacna aaggggcatt tttaaattt 480
 cancaaagaa gnccttaaatt ttccaccctt ggtangggaa ccacttagcc tggtaggtcc 540
 caanaaaacc gtaccggta agaaaagaaa atatttgggg aaaaatanta ntgcttgagg 600
 tggaaacttg tggtttaag ccaccaagaa ctggatncc cantcacacc ttggttc 658

<210> 516

<211> 260

<212> DNA

<213> Homo sapiens

<400> 516

atcttctggc aactggctga tctgccccca accagtgact catgcctcaa ccagtctgt 60
 ggccccatct ggaggccgac tctgtgcagg aggaccattt tccacacctc tatgatacca 120
 tctccaacctt attcctgcc cctgcccac caactgttc ataaaaagcc tagcctcgga 180
 cttctcagag aactgtatt gagtaataac tccaactact gcatggccag cttgagtta 240
 ataaaactct ctcctgcaat 260

<210> 517

<211> 436

<212> DNA

<213> Homo sapiens

<400> 517

gtttgtgaac atccacgtgc agagattgga tctgtggaaa cggcactgct ccagagactg 60
 cgctgaacca gcaaagaatg aactgtgata acaagcaggg agctctgtcc ctgagaacgc 120
 ctcacagaaa gactgaaacc acagtgtctg acctgagagg ggagcaggag gtggaaactg 180

gaaggcagta gtctaactg agagctgaag aggctacaca gagatgggaa gatctcctaa 240
 tgcactgac attgttgtc tcacatggtt aggtagatta tcataccacc tgcaaataat 300
 tacagnnttg tcttttctt cccatactta ttnctctca ntttaaaaa tttatttgn 360
 atcattttgg ctaagggacc tcagtacaat tntaaataat catggttaca ataaccaa 420
 gtatccagct tagatg 436

<210> 518
 <211> 452
 <212> DNA
 <213> Homo sapiens

<400> 518

gaaagtaaataaatacttat agattgatca gaaagtggaa aaagattgat tcaccatttt 60
 gaagaacaga agagtctaac attgaaggg aatgagaatg aagataccca cgcaaaccct 120
 tccaaagctt tcattgttt caagttaaaa aacaggattt tgtgtgtgca aaggtgctgc 180
 aagcggaggg tgctaattggc tcataactgc cccctctcc agagatttcc tcttgacat 240
 ttgcctggga gggtacctcg ccacccccag cccaggggca gccacactgc aagggttaat 300
 ggacatgaag aatacaaaa accngccac cccntcaag gnggaaaaa ggatgcaatt 360
 tctgatggg caaaggcagg caaatgggtc ttactccac attgtctcag gaaacacaat 420
 aatagtcact tggtctcac catatccct ta 452

<210> 519
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 519

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 catttaagcc gaaaactcat tacagaagaa aattagaagc gatgagaact gcaaatcctt 120
 ctttattgct tctctaattt ttcaaaaaca aaacttaact actgtaacga aactattcag 180
 ggaatagttt tatgattaaa gaaaaaaaag tgttgcgcaa aaaaaaaaag gnnngcgggg 240
 ncnnntnanc tnggncttan cnaggngaa ctgttcaaa agggggggggg 290

<210> 520
 <211> 577
 <212> DNA
 <213> Homo sapiens

<400> 520

aacttgagt ttggtgaaaa aaccaatggg tggtgggtn ggtggcctgg accgttttg 60
 ccaatcttg ctgggctgg ccttaacaa cctntactt tnaatctgg ggcaagctn 120
 caanggaang gaacattctt actggccacc aaagttinaa tccaagcaa ggttaacct 180
 tgggccacct tcnttctgg gntgggccc attggangct tctaaccaat ggtacaaatc 240
 ccaatcaatc taactgggtt gggcttcaac caccaagggt ttctgcttct gggaatttcc 300
 gggctttggc cctttccgc ttggctgggc ccattggggg tcacaacccc acccaangga 360
 aagaataaaa gcttngaag ccttgacttc ccaacnaaac ttccctttt tcacggaaga 420
 agtnaaaca agcaagnctt ggaangggcc cttttaacc aaaaanggc aanggttggg 480

ccccaanttt ttggggaat anttttccaa gccncccca gaaaaatcan ttgangcccc 540
 aaaatnaaaa cccctctttt tntttttat taaaatt 577

<210> 521
 <211> 664
 <212> DNA
 <213> Homo sapiens

<400> 521
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 ccaactgggtg ggggggaaag aattttccgg tcccaggcc ccagctgtg gaagaatacc 120
 aagtaaaggt ttcaaagaat ggtcaaggaa gggccaaggc cccggccccc ccttggett 180
 cggggccaag caacaacaaa cgccacaatc cttggaaag ggaagggtcc ctggaagaa 240
 taccgaatgg aacaaggggc ccattcgggg ggggaaagct tgcttcaagc cgctgggaa 300
 gtgggtggga ccaaacaat tgaaaactc acttgacaaa aggggaaaaa ggggctctt 360
 cctcaataaa ccttcgat cccgaaatac cactgggca aaaaggggca acaactttt 420
 tggcttggg accctcttc cccaagnntc tgaataccc ctttaagaa aagaaagaan 480
 ttttaggagg taacctncc aagaatttt cntttacaa ttgggcaatc ttnccaagaa 540
 aatggggent ctngggtaa tttaattggg aaatcctaaa ggnggccctt ttttaaaat 600
 ggtattcccc accgttttg gtnccctt aancattct tttttttt tcaagaatga 660
 atgg 664

<210> 522
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 522
 gtctcatcct atgagcttgt gctgattgc tgattacat atctccactg gcgaaaatca 60
 tatctgttc ttaggccaa tttcaagtt ccaagcattg gcagtgtgac cacaaatata 120
 tatgatctga tgctttattt gatttttggg tgtttttt aatggaagt tagaaaggga 180
 ggggaagaagg gaggggaata ttgattgc tgtctagcca acacaattct aaaaagcatt 240
 aagtggaaac tgctacaagt gttatttc taactcttc tggataatg ggaacagtca 300
 agatctgaac aagaagtcga tataanggtt tgcgggttat gatagcata tcagccagng 360
 gatagactaa accccagtga cagctgggat ggttcttga atcagacatn cttcaataac 420
 atgtttcccc aaagcttata aacattgggtg g 451

<210> 523
 <211> 666
 <212> DNA
 <213> Homo sapiens

<400> 523
 cagaactgga ggggtcttct attccctgga gaacacaaca attattggaa ataaggggcc 60
 caattaaata aaccctaca aatgggtctg gtaaatggg gccaaagggtg gaaagaaaag 120
 gaaatccggt ggtggcctc ttccgctttt aaaaatcaaa aaggcttagg aaaaatggaa 180
 ttaagcctt ggacttgag gggaaagggg cattggtttt gaaagcttga aaacaggact 240

tggaaaggcc aaggttcctt cttgcacca aaaagggcc aaagttgtt taaaagcaaa 300
 aggggaaaaa attatttgg aaagtaaat taaaggtgct acttctaag taaaccacaa 360
 ttttgataa agaaaaaggc caaaaacaag ctttatttg ctgggtacc aagaagaaaa 420
 gttttggagg tccggttgg gggtaggaaa anaatcnaaa ancccaggcc ccccaaacca 480
 nttccntt ttaaagccaa aaaagcccct taatttccca gggaangggg cccccttaa 540
 cctctntt tcaaattct tnttgaaaa gaaccttaa gaaagaagcc ttggactta 600
 agaaaccccc aagacanggg gacntctga ctcaagcct tncacgcca ggaacaacca 660
 agccaa 666

<210> 524

<211> 580

<212> DNA

<213> Homo sapiens

<400> 524

cataactga nagtcanagc tcttctgt gtcacccag gcttggagt gtagtgggca 60
 ntggatcatt aagcttttt caaangctt cttccaact tctgggctt caaagccaat 120
 cttcccat tctcaagcc ctcccaaag gtagccagg gactaccagg gtggaacaa 180
 ggaaaaggaa agtggctggt ggtaccact tccaaagaa tcaaccctc aanggtan 240
 ggctggtt tttggctc ctcccttg gtcttttc ctttccac ttcgtggga 300
 tgaaagaaa aatggacaaa agcaaaagcc acatggga aagaaagtct tgggacctt 360
 ggctgactac cgaaagagg acaacaacg gntcaactt gggacactga ancctggact 420
 gnttagatga tcagacttag gancangga agatttaaac cncctgggata tgaattcaag 480
 ggcattatgc ttttatacc tacaaggta agccaggctg agactcaana gaaggtaaa 540
 taaacttnt tccaaggacn aactgnttag aaactggaaa 580

<210> 525

<211> 519

<212> DNA

<213> Homo sapiens

<400> 525

gagctggagc gacaacaac acgncgttc cgttcaacc acctttctt gttcccgtec 60
 ttgaggacgc cgggccgggt caagtggta agccttccan cttggtgt gggaaaggcg 120
 aacagaaagt cattggcggt atggttga gcaagaatna agaagccaa cgtggggcaa 180
 agtttcttc aaggggtacc cgacagggt ccaatccctt gagaaacctt gggccaccc 240
 ttggaagccg ctatgtaga gacgcangcc caagggaaaa tgcctatgat ctgggaaagc 300
 caacctggct gtcctgaagc ttgtaccaag ttcgaccaa cttctttc agaccacggn 360
 caccggcca aatncttgc tgaaaggccc ttaaccaact tggncggaca caaaacttta 420
 cccttgca agtgactga tcgaccagg cacattcaaa gaaagaacgg ncaattccga 480
 cagaatttt gtacctggg ggacctggtt gggaacgt 519

<210> 526

<211> 364

<212> DNA

<213> Homo sapiens

<400> 526

gaaacctttt cctcggagac gatttagaag atagaaggta atgatggcca atacagaaa 60
tgcattctta atncaaaga tgaacaac caaatggaag aggatgagag aggggcaggg 120
gcgccaagtc accaggcaag gtttctaagt gtaaaatagg aagcacacag acctgataa 180
gtanttgatc caaagtgaa catcaacgta aacagctgac tgaattgaa gccagactg 240
tctgatacta ctgttcagc ttgaaactg catcattcca gctgataca ttaatatagc 300
aatctgtata aaaagtctt aactgtgaga cagaatccag gaatcactaa cattcttaa 360
agac 364

<210> 527

<211> 304

<212> DNA

<213> Homo sapiens

<400> 527

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taactagtct atctagtgga gaaaaattct tgtgggcagt ttgaaagcct ctaagagaag 120
attatgaagt ttggaaccag atgccaggag acacaggagaa ggctgtagat gctttgaact 180
tgttactgg aggaatatgc tatgttgtgt acttcatctc tatgaatatt tagcaaggat 240
tttactgaa cgtttgcatg aataaaaagt atgccatcag tttaataaa gagacaccca 300
ctcc 304

<210> 528

<211> 447

<212> DNA

<213> Homo sapiens

<400> 528

gtccccaggc actgghanana ancagagcta aggaggggaa gtgtctgtct gtcttgctga 60
aagcagctgg gagggggaaa aaatagctct gtccactttt ggctatctca agatgaacat 120
ggagctctcc agcagaggaa atgtctagga ggataaggta acatctatca agtgaacct 180
ctatgcgaac acatctgctg ataggcctga cccatttcta tcacttgaga atctcaagta 240
gcttgccac cagccacaga gagatgagga aactctggaa aaagcagctt gccctagta 300
tgtcaggctc acaagaaaag ggagacantt ggtnggggng tttttgggg cagggaacc 360
tncctcacag gacacgacct gggaagatca naaaacccat tggnttaagc tncaaataga 420
gaagatgttt gaaacacaga gaaggcg 447

<210> 529

<211> 450

<212> DNA

<213> Homo sapiens

<400> 529

gcattctact acaacgacct tagagggtgc ataaactgaa atataaaagc tgggtctatc 60
aagcaactaa aatctgattt gatggtaaa agctggaaaa atccaagaat gaatgaaaga 120
gcttggtgat aggcccagac agtgggcagc atggctcttc tccagcctgg gacacagctc 180
atactcagg gtggtatcct gagagaagct gcctgagttc agccttggcc tatccagta 240

ctcactgtgt gcaccagag gagcttctgt gtatctgtga gacctgttt cctcatctgc 300
aataccagga ctcatttct aacngggctt ttgaaacctn aataanntaa tgtaaggctt 360
gggccatgta ttttttcaa naatcgttgc tgtgaaagag ccagtgaagt cacagagggt 420
aaagtcaatg gtcaaccttc ctgattaatg 450

<210> 530
<211> 248
<212> DNA
<213> Homo sapiens

<400> 530
cctnagnaan aaaaantntn aaggggcana catnaaaatc ctgaacaaca gctttaataa 60
tgctagagag gcaaacctca gaaaaatact aaaacagcat caaaaaggaa tcaaaatacc 120
agccacaatt ctatttcacc ccccaacaa ttatcaaaat aactcaactc tcacccaaaa 180
aaaaaaggcc ngcgaggcca attcagctng gacttaacca ggctgaactt gntcaaaagg 240
ggggggggg 248

<210> 531
<211> 356
<212> DNA
<213> Homo sapiens

<400> 531
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actgcaggct gtgtcccacc atggatcaca ttcagcccag actcagctcc ttctgcaacc 120
ctgccaaaga gcctacgaat gacggcccca tagcccaggc cactctatta atgaagaaga 180
gtgactggg acacttgagg agaacctgtt ttgtctatg ttttgaagc aagagtaaaa 240
aatggaatgc ctcaaatgc tacaatccct ctatattcag gtgagggaga ttcttgtaat 300
tctgtgggtt atgacatgat attcntttaa atatttaana acctttggtt aaaatt 356

<210> 532
<211> 455
<212> DNA
<213> Homo sapiens

<400> 532
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tgacctggag ggatgaggcc tggaggccga cagcaggact ccgtcagtga ttcttcagc 120
tcttgaaaat gatccctgaa tccaacggag ctgcacttac agaatgaaa aggtagaaat 180
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aagatagggc attgactcac tcagacctgg cttgccagc atgcattgca acaatgatgt 300
gcaagttatt aaagacatga gtgaattcnt gccaaattgg canaaaaaaaa accaagagtt 360
ttntacaaca aaaaactgct tatggaacat atacttctgc ttgagtgaa tgtgttgggc 420
ttgagtgtaa gaaaatgcaa gctgcaaatc taaaa 455

<210> 533
<211> 456

<212> DNA
<213> Homo sapiens

<400> 533

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tctagcactt tgacatgaga actgaagaag aaggttttag gtctctgacc ttgccctgct  120
cctctgtct atcaatcctt tgcatttcc aaagcacaga atataagttg ttctctgaag   180
tttctcatc tgcccaaatt tcagacatgc caaagaagaa aacagttacc ttgggtcct   240
tttctaagct ttattaact gaactcatct tgcagaaaga aagactgaaa tctgtcaaca   300
cacttggaca gactttgtc acaaatact nggntnggtn ttaaagggcc ccaaacanac   360
cttgntccca gggccattgg ntgttattg gaagcccatt ggaattcttc cttaaagataa  420
tttattatgc tccgtcaaat catccatact tgaaaa                               456
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<210> 534
<211> 444
<212> DNA
<213> Homo sapiens

<400> 534

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tgaaggttg cagctccagc gaggctaaag gaggagccag gcacagcgga tgaggaaatc   60
tctgcccaa gaagtggcag gaagactcct ctccctgctc acacaggctc ccaacatcac  120
tcccaggaaa acaagtgcc a tccccaca agactgtgag ctctgagcac agcagagact   180
ttgtcagttc tgttctgga tgttcaccag cacatggcag caaatcctga gagctggctg   240
cagtcagact ctctacctg acccaggagt gaccggggca cagagctgat tccagagaag   300
tctctctaa aacaaggnat gggaaccact ttttaaccg gcnttgttg cctttacag   360
ttgaggcact aaattcatgc atgagcggcc tgggttcaaa cctcactct tgccacttct  420
tggctgagtg acctagaacc aagc                               444
```

<210> 535
<211> 502
<212> DNA
<213> Homo sapiens

<400> 535

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cagaaactga agaaccnna tggaaatcg nnggaaatcc ggnnttttaa nttaacnngg   60
nanccnntcc naaagtcctn ggaattttgg cccanggttt ttgatggac tccttcccaa  120
atttttaag ttaccggct ggaaaactgg atggctggcc cgatcggcct tcgggaaagc   180
cccggtaaga accatcacgg gatgccgaag ctttaaggt aactcttcac agtgggangg   240
acanggaatg ccaggccntn tgaagcccaa agcttaaagc catcatattc ccggggacct  300
gcacacattc aagatgggcc ggntcctggc cttactgat gacatttcca nccccaaaaa   360
gaaatggaaa atgggcctgg ttctggcct taactggagg acattattt ggngaaaatt   420
nnttttctt gggcatcct gggcccaaaa gttcccta attgagcacc cttgggaacc   480
cccaattctt ggctggccaa aa                               502
```

<210> 536
<211> 448
<212> DNA

<213> Homo sapiens

<400> 536

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cagggaactg aaccagtggg aggaagatgg ggcctctgat gcctggatgt gaagaattca   60
gctaaaattt tcaatagatt gctgaagggc caactatgta ctagcatgag aaaatagaat   120
ccctggaact gcagacacag aggggttcac agccactctt ttccaagaac ctctctatgt   180
gctcacagag aaagagtggg ggcaggacta gggtagaggg aaagctaccc tcaattctac   240
aggaggggagc agatgctact aatggaaagg cagagagctc ttcaaaatta ctgtccctt   300
aaaagaacaa aagctttaaa ttgctgggga aagaagnacc atacactgtc atgctggggg   360
gcatctgtat ctgaggaaa atgttaaaga atgaaagact tcaccctgc agaagaacag   420
taagtgatcc tagacctgga ctatcaga                               448
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<210> 537

<211> 489

<212> DNA

<213> Homo sapiens

<400> 537

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gnanaactga tgacacagng gngntccaaa aatnaccncc cgcncagggg cttttgntt   60
ggattccgg aagaatcaan gggcagctgc aatgactctc ccgccggta ttattggcat   120
tggcagcact tattggcagc tggcagaacc cagaatgaat ccacagggaa tgcttgtag   180
tanccaaatc aagtaccaa caaaatcccc gaaatgggtc aaaccagaca gttcgcactt   240
ttgggcacat gtgtatgctg ggagcaccca gttctagtc ccagaatacn ccaaaaaaat   300
aggaaaacct atgtgctatg ggcttgata gggaatgcc aataattg gncctggtct   360
tcaaaatcat tggggatgta aaanactgca accanaattg cttntgagt aacctgaggc   420
ataaaanagc tgctgatata agtcaaagct tgcctctttt tggngggccn ccaacatctg   480
gtattttta                               489
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<210> 538

<211> 315

<212> DNA

<213> Homo sapiens

<400> 538

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gcaggagaa aggaaatgag aagcgtacgg aggtcgagag gattcagagc tgtctactct   60
ttaatcagaa ggaattactg aggagagtta gaaaggcgat gtgctcaata caaaaccggg   120
actgggatga gtatcaagtt actgcaactc gttccgccc agaacaacaa acgaagggtg   180
gtagtggga atgagactct caccagtgtc ctctgctgaa gttccgggtg catacctccc   240
acggctactt tatttactgc agctggccaa agttttatag cctgtttcat gtattaaaat   300
tcaaattgtg aaac                               315
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<210> 539

<211> 307

<212> DNA

<213> Homo sapiens

<400> 539

gctgttgcta cccatgtgag agtaaagaag ggaagttaaa tcagtgtgc ttccttgat 60
 ggttccattg atccaaaagc ccattgaagt caataggatt tcgtctttag cagaaatgct 120
 gcacttagat tatctccata ggaaagtaca gaaaaaaaaa actgatcgaa atagctgagt 180
 tactttcaaa ccaccagcct gctttatfff taaacatatt agaagtttca ctaatcttta 240
 aagnggattt tgtncactga gagtaatact tataataata atataatgca ttaaagaaga 300
 gaaaact 307

<210> 540
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 540

agagaagaga aagaaagaga actccttgaa cttgaaaaca gaccatcaat gagacagggt 60
 ctactgtgt tgcctaggct ggtcttgaac tctgcattc aagcgatctt cctgtcttgg 120
 ccttccaaag cactaggatt acagatgata caggtaaga ttaagctgtt tcttcatgt 180
 gagtctcatt actgagatct gattccacct acaaagggtg cctctagggc ttagattga 240
 gatgttaaca tggactgaac tgtgtccctg caaaattcat accgttgaag cccagctcc 300
 cagtgtggct gtagttggag ataaaacttt ttaanggan ggtaatcaag cttaaagaa 360
 gtcataaagg nggagctcta atccaacagg gtcgatgcc tcataagaag aggaagagac 420
 atcaagagt ccatgcaca at 442

<210> 541
 <211> 469
 <212> DNA
 <213> Homo sapiens

<400> 541

aatccctgc tatgtgcttg tcacaggaga ggcgctcaac aaatgtcagc tgaatgtatc 60
 aatagaacct acacaagtc aaacgtcaca tcaagtaac aagatgttta gctgggcaca 120
 tggccactca aaatgaagac ttattcttg gctgccttg caggaagata tggccacgtg 180
 actgagatct ggcctatgga atgtgaatag aaatatattg cacctcccc ttctcttc 240
 ttctgatcat ttatccagt ttcttgaac ttggatcggc tgctgaaact ccatctcgta 300
 ttatgagggg aaaggccata gtccactaga gtactggta taggaagctg gaaaaagcct 360
 gtgtcccaa ggaattttt gagcaacgt atcatgtcac tcttgattg actgcctaca 420
 agacattttt aaatgtgaga taaataaacc tcatatttt taatcaaaa 469

<210> 542
 <211> 470
 <212> DNA
 <213> Homo sapiens

<400> 542

ctacttecta cagggtgagc ccaggacacc aggacagagc tgctgccacc tgcccatgtc 60
 ttccaaaagc gacatttga gctcattact actagatgtc acaatacaga atagggtata 120
 cgtcgtagcc ggctctcagt cccaaaagca gggtatggcc atgcaggaaa taaaggttac 180
 agagtgtga cattatgtg atgacatgtc gcttcaccc aaaaaagatg cagcaaagtc 240

taaaactgga aagagctttg gagatcacca acttaacatc ttggtattt taaagacgga 300
 tgaataggtc aaggtgagaa atgagttctc cagtgtcatc cagcccttg atatacagg 360
 cagagatgga actactcctt cccaacccta taataataaa aatagtctac tctcctcatc 420
 ccacaccctt tcttgatata tctatgcaa atgcacagaa gatactttgg 470

<210> 543
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 543

gtttatgagc aggaaccatt gcttaagaaa tactcaccat caagcagaat catgaggac 60
 agagcaccat gaactcaggg agcaaagaga aactgtggg ggtattctta gggatggaat 120
 ctccacatca aatccattgg caagacctgg atgttcttgg aaatgtgaaa cattgaaaat 180
 gttgaacatt aatcttctcc tcactccag tatcaacacc caactgaggc caccatcatt 240
 tcttgggttt ggggtggacaa ttgcaacagc cacctatgac tgctgtgact ttgtctatga 300
 ctccagttaa tccatcctcc actccaccgc ctgaatgac tcttcaaaat tcacagtagg 360
 taatgacacc ccagtggaaa atgctgattg ccttctactt agaataaatc ccaaattctt 420
 tactgtggcc tataaaaccc tcagtgcaat cctcaaaga 459

<210> 544
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 544

atctgaagt caaccagggga actgggtggc tctttgatg naagaaaana ttaaccatc 60
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 tcttgccaat acaaatatat atattgtga agcacaagac tatatccaca gataggatta 180
 catgttaact gaaaagattc aaggaagaga agatgggcca tcaatgaaaa atgggtggtta 240
 caatgaagca actgatttca cagctaaggc gagagcactg cacttctcc tcatgctttc 300
 tgggtgntaa actcccacta agaagcatga aaaagagcaa gatgcacttg aggagataaa 360
 gcagacctt gaagggaac caaacatcag ttcaagttgt aacttagaga ccagaaaaga 420
 tattccaagt tttgtgaag nttaaaatgt gctctttgt atggaaaaaa taaatcctg 479

<210> 545
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 545

gaattgcaag gggagctgtg ggcttgacag tgctggcagc cattgcaact gaggatggaa 60
 ttaacatgga acacaacaga gctggacgtc tgagccctaa ggacggcttt tgggatctca 120
 aatccagcta tgctgaaga cctaaagcta gaagctcctg tgcttttcag ttacagccag 180
 taaatcctct ttttggctt aagccagttt gaattgggtt tctacacagc ctgaaactgc 240
 tatgaagta aaggtagtgt tagtgctgga agacactgca tggataacct cctcaagggg 300
 ccaattcact ttaccacca aatgccctt ttaccgatc ctgtctact gctaccttgt 360

ttgatagatt atgtctacca aaaataaaca aaacccgcat tgagaatc

408

<210> 546

<211> 422

<212> DNA

<213> Homo sapiens

<400> 546

ctgttattgt tccttgaaaa acagtataaa acaatacaaa cactcattga catggaccca 60
atctattctt gactttttaa ctgatggatc acattataat gcagaagggt ccttgccctg 120
atgctgaaaa cagacttgcg aagctgaaaa tgataagagt atgactttta gttttggaat 180
gttaagaaat aataactgt caaatcattc aatagatgac attgttaaaa catgaaacat 240
gaatatgttt cgctaaagca tcatcgtaca attgacaatt cttgtctatt ttactttta 300
tttgggcagc accatgaaca aacttgtggg gccccacgct ccagccacgg atggtgcatt 360
ggctgtgcct cactctgata atggccttcg tctgaatgaa atttccagtt tccaaagact 420
tt 422

<210> 547

<211> 322

<212> DNA

<213> Homo sapiens

<400> 547

cnaaactggg ggggggtctt ttaagccgag atcgcgccat tggactncag cctgggcaac 60
gagcgaaact ncgtcttaaa aacaanaag ctgncatttg gcccnaatt tngccttga 120
aaccaccacc gggaggggcg ttcccacaag cttcccggtg tgggggctga ccaattctgc 180
caggaaaact agggcgacat tcccaaatca tcccctgac agccctaatt ctactttta 240
agaaggntct tggtagcatg gaaaaccgca aatgcccggt aaaggcagat ttaccatgaa 300
agctaataaa gtttctaacc tc 322

<210> 548

<211> 406

<212> DNA

<213> Homo sapiens

<400> 548

gtgggggtct nttcangaag ggagggcaga aaagaaagaa ngganggtgg gantcaaag 60
cttgggggaa cacttgggaa gagatgggaa ttagaagaa gaagggtcc cgaaccagac 120
agggacctca agggcagaaa accaattatg gtcaattaac ttctcaact cagcaaatat 180
tttcaaatg gtcaagcaca tggaaggag ccatatgaat gacacaaaca tgactggaaa 240
cctctgtctg cctcccagag cttcgattcc tgcactgggg tcttcaaac tcaggtacca 300
aatggcttcc tccgagggga aaaactaagt cctgccagat gccctgggt acattactt 360
gggtgccatt cttaaattta aattaaacta ctttatccc actatt 406

<210> 549

<211> 422

<212> DNA

<213> Homo sapiens

<400> 549

gaacatcatt ctttctcatg catggtctgc agtgatggga actgaatgca ccagcagcag 60
ccatatgagc ttggaggcag atcctgctcc aattgagact cagctgagac tgcagcccca 120
gttgacacct tgattgcagc ttcataagat cctgaatcag ggaatccatc tcagctgtgc 180
ctagactcct aaccgtaga aatgcgaaag gaagagtaag ctactctcac ctgggagggtc 240
cagctggtga agaccacaag agactgtctc cagtgggaaa gaggcttgag ggagctcatt 300
tactgttcc acatgtgtgg tcacagaaaag aggcacatc tatgaacaag aattcaggcc 360
ctcaccagac atcaaatctg ctggtttctt gaccttggac ttccaacct ctggagctgt 420
ga 422

<210> 550

<211> 330

<212> DNA

<213> Homo sapiens

<400> 550

atttctcatg gaaaaggacg gncctggagcc ttgaacagg ggctgggggtc ttcttctgg 60
gtcagcaatg gggggnggaa aaccgaacgc ccttcggggg aaaggaggagg tcacccaag 120
atcttcaagt tcaccgaagt ggcagcctgg gattcaaggt cctgcctgc ctccagaac 180
ctgagctctg aaacgctgga ctaatcaaga acctcttggc cttgaaaaa tgaggcctat 240
tgaacaaaga catttgaag aaaagggaact attacaacct agtgtaaagt aacaagcaaa 300
taaaaaatga aatggcaciaa ctctctccac 330

<210> 551

<211> 459

<212> DNA

<213> Homo sapiens

<400> 551

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gccgacatcg agtatcgga gatgaaggga aatgaagaga cagcaactac ccgaagccct 120
gacggcatcg ctgggctgtc aatcaacct ctacttctc taacttgcaa ctacttcac 180
gggatgtttt tcctattta agccatttg agcagggtaa tctgttatat gtggttgaga 240
gcagccaact gctatactag tctagagagc taaaccagg cacccttta acaatctca 300
gtcagagtgg gtcaggacaa taagcacaac ctgctttcc agactcctt gtctctctcc 360
ctgaatgctg aagaacaac ctcccttct ggtctcatc acactctac acaccatct 420
gcactaattc cactgtgctg ngatctgctt tgtatacat 459

<210> 552

<211> 472

<212> DNA

<213> Homo sapiens

<400> 552

ccacagatcc atgatgtgca gttctcttgg agcaggcgct ggcttgtgct ggtcactacc 60

ttccacaag tacttccttg ccaagaaggc cgaacaaagg ttcaaactg aagttaaagg 120
 gggggaaaaa tgaaagggaa actttcttgc accaaaggga agcttgcccc aagctttttg 180
 tgggggggaa gaaaaagtgg gatgaaggga ggggggctga aagaaagcct gatgggcagc 240
 cctgggatga agaaacaagt gacccaagcc aggtgggacc ttccaggga gatatcctgn 300
 ttttctggc acttcatcac tgtcatgtgc aatgacttct ttcagggtt gccagaccc 360
 gacccttgaa acaaaactct tgactttctg ccatggatct cttggggcc cangactgg 420
 ggatgcctt gaagttttgt attcaataaa acttttttg gctggtgata at 472

<210> 553

<211> 440

<212> DNA

<213> Homo sapiens

<400> 553

gatgggtgtg tgtggcccat aaatcaactg gacgcacttc cctttgttg cacactgcca 60
 cgcacacagg ctgtctatga agaagaagaa attttctca gaggaacta gaaaactga 120
 acgtgtacac aatgctgaca tttttgttg ctttaccctc tcttaagaat ttctaccatt 180
 cctttgagaa gtgtattatt tttaaaactg tgtatcatt tgccttctg ggcaaattgc 240
 acagtcaatg atatgtttca ccgagtatgt aaatccctt tacatatctc aaaataatat 300
 ctaattaaaa tgtcaagggt atagctcatg aggctagagt ggacagggt ccacccctc 360
 cctcagctc tcaagtaac atttaagta tgcctataa ttaggagcaa ttataaatc 420
 caattaaaaa gaacctgcat 440

<210> 554

<211> 516

<212> DNA

<213> Homo sapiens

<400> 554

cnnaactga gggtnagag aaatgagggc atngccnata acttggagt tctnaagtt 60
 tacnatggga aagcnggcc cgggtccagt ggcattgccc tggtattca ccacaactc 120
 atggagatta aagcaggag ggaccttct gagcccaagg aagttttgag gnttcaagt 180
 agctatgatc atgccactgc acttccaacc tgggcaacca gaagcaaac cctgtcaatc 240
 aatcaaagca agcagaccaa gcaagggaaa gcaagcagca agaagcctc gcatgagctc 300
 atgaatggct gctgtggaaa attactgacc gtcaccagct gaataacang ctatctggag 360
 agtaaagcca gatgaaactg atgntaaatt atcaaatgta ccaaganttt tgggcttct 420
 ggccaaaacc ttcatggga acttagaaga gaaaaactgg aaacnccag agctttttt 480
 taagcttctg agcccacang ctgtcctac atccct 516

<210> 555

<211> 407

<212> DNA

<213> Homo sapiens

<400> 555

gactctgggg agctcctgca ttaagagctn annngattng aacctnanng aanaaactgc 60
 ngannnaggg agnattgaan ctactntgtc cactggacct tgttcccang ctccgntga 120

agctgaacac tccgnatgat ctccctgccca ccatancang ctatgaagtt cattacacat 180
 gcangtagna gacaatacag ctctgcttcc atttctgagc acctacggta agactgcat 240
 tattcagtgt gccancctgt ttccaagcct acaatgtata gtctctctag tacgtaaact 300
 cattttttt ctgagagagc cnagnagaga cacaggcagt ttcttttca aaatgtgccca 360
 nanattccaa aacaatctca aagcattaaa ggctatgtgc acaaagt 407

<210> 556
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 556
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 cagcaaagca gccctctgat ccataactt tagctacaac ttacatcacc aaggtccata 120
 ttatatactg tgatatcca gctgcacagc gaagaatccg tcacctgctg acaaaaacaa 180
 atgatgctga gaggtttggg cacaataaag tggataatta tacacaggca cttttccca 240
 tgcagcattc ttaaggatg tgccagagta tcttgaaga tcttgaaga gctatgaact 300
 gatagaata caatcttgga ttattttt aatcattgc tagttaataa aattactgct 360
 ttcaatgt 368

<210> 557
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 557
 ggtctcgtc tgttaccag gtggagtag aagtgggtgca atcatggctc accgcagcct 60
 caacctccca ggctcaagca ctctccctc ctgcctcagc ctctcaagta gatgggatca 120
 cagggtctta ctctacttg gaatatagat gggatggagc tgagtggcta agtacaagc 180
 tagaagcagc ctggctcaga tggtatata aaccgaaac tgtctacacc cagactttat 240
 tcttctacaa ccaaatcct caaacacaca atctgaacag tagcagtgaaggagggttta 300
 aggtgggggt gaggggagaa agggagtaat atgggtttta 340

<210> 558
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 558
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 ctgcccagcc ttacctgcc cagcttcttg tctacaggt ctcaagtcaa atgccttctt 120
 ctcaagtgaag acttccttg cacttgctca acataaangt catctgggta ttctctctcc 180
 agcctgtggc ctatttttc taaagaactt ttcagaatct catccatac ttggtttact 240
 tgtttgaac cagtgtctct ctccagaat gtaagctcca ggagagcagc acttctctct 300
 tgatgttatt cctgcttcaa tcttagcgt ctagcccagt gcttaataca gatttgttga 360
 ataaagatcc gttaaag 377

<210> 559
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 559
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 tccacctct ttattctgct gtgtctgtg ccacctccag cgccttttca acgcttcctt 120
 ctcaactccc ttctcatca gtgcatacaa agctttccgc agcatcaagt cccgatcatg 180
 gaaacccac attcctgtgg caaaaaagca taatggtgaa tggaggactg cttcaagac 240
 tcaccaaggg aggetgcatg caggaggcag tteccatctc cagtagtgc caaaggaagc 300
 agcctctgag aggtgggac cactcacc caccagtcca aacgccctgt agaaacaaga 360
 tagtgganga aaangagaat attcatgaag cccttncctt ttctatttt gnaaaaaanac 420
 tcaaagcag cctccttag gaggcctacc cagaataaaa ccatcc 466

<210> 560
 <211> 455
 <212> DNA
 <213> Homo sapiens

<400> 560
 gatggtgggg aacatggcga gaccagtac ttcaagagc ctgtgcccat tgctgcactt 60
 tttttgctg tgaagttagt gccttgatca gaacagtga acggcgcttt gaagactcag 120
 atacagtgc aggctaagaa gggagctgct gtgtttctg ggggtattgg tctggctac 180
 caagggaata tgggctgct actccccgac ggagttacag gataccaaag agaagagtaa 240
 acatgacca agaaccctac gtctcttctt ggggaagggt tagtgtgtct ctggtttac 300
 ccaagatagt tgaatcaggt gcagagggaa ggaactggga gcacacagca agaaagtggc 360
 tgttcacaag ctangacctg ccctntggc ccttggtttt gggcnttcn gcctccaaa 420
 ttggganaaa aaaataaatt tttgtgtt aagcc 455

<210> 561
 <211> 56
 <212> DNA
 <213> Homo sapiens

<400> 561
 atgtactat cctcaagat ggtaattaat aaaagacaga aaaatgccta aacacc 56

<210> 562
 <211> 397
 <212> DNA
 <213> Homo sapiens

<400> 562
 aaagtttgt gactcatgac ctatgact gcaagagcct acaatgaagt ccctctgcaa 60
 acagaagcaa aaggcacagt ctgctctcc taaagatggt cattttctgc tgctatggc 120
 cagtttgtgc ctcaaggac tgactgtga aaaaagagcc cagaaactct tgaactgac 180

ttacagtggc ttcttcagca gtcagctgta acgatggctg gagcacctgg tacctgagtg 240
 agggccaaga atgggctctg catgtgccct cctcaacaa tigccacca cccatttca 300
 cacaatgca gtgggggatg aacctgtagg gatgggtaat cagcctgaaa ggaacaatt 360
 tgcatagtg taaaatctga aaaaataaat tattatt 397

<210> 563
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 563
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 atcttttgaa ggcttggaaa gaacaaaaat gtggagaaaa ggaacatttt ctccgggtt 120
 gagctgagac atcatcttct ctggccctga gacatcagag atcttgcttc tcaggtttt 180
 ggactcatgc caggactcat acacattatt agctccctaa ttcacagccc ttcagattta 240
 gactgaatta caccatcagc gtttctgggt ctttagctat taatagcaga cagcagatca 300
 tgggacttct tggactccgt aattgagtag tcaattccta taataaatct ctccatat 358

<210> 564
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 564
 aactgaggtg gcagtctagt aagatttaac gatactgtct gactggagct ggaaagcagt 60
 gagtatggct gctatcggag aggagagaga aaatcaatct ctgtgggctg ctattatcca 120
 gaagaaatgg agagctccca atgaccaggc attccaccga gcaacagggc ttactgcct 180
 ctgctctcat tgaaaaccac acagagcatg caacactttg ctactccaa aactttatga 240
 ctttctcan ttcaagcaa tgttgaatgc tgactcaata agatacaacc aaaacaactt 300
 gttgatgaga caaagctgag ttatttttt accatggtaa aagtgaacgc t 351

<210> 565
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 565
 actccccag gagcacagca agttctccag ggtgcggaga ggcagtggag agtcttcagg 60
 aaaccagggt cgaagcctc aaaacactca agttctctt tctacaaca gaccagcctg 120
 tgaatgttca ctaatttca accaaatgat gtgctgtaat caattacact ttaattactc 180
 aatccagaaa aaagcgatca cttaaataag cctcatggtc agagaatttt ctaaaaattt 240
 caaattgctt ttttcccta aaggaatgta ataggatgac aataaaagat cctcacgaat 300
 aaaaatatat gagaataaaa tcttgaagt aggactgtaa taaaagcata actccaaaaa 360
 aaaaagggg ccngnggggc caattcagnt tgganttaac cgggntgaac ttgttataaa 420
 gggggggccc ccc 433

<210> 566

<211> 40
<212> DNA
<213> Homo sapiens

<400> 566
gtttgcatcg ccagcttcta tatattacgg ccttttttg 40

<210> 567
<211> 398
<212> DNA
<213> Homo sapiens

<400> 567
ggtgaatttg ggacccaaac agttaagcaa ccagccaatt tgcttccctg ctgcctccca 60
gccaaaggaga tgaatggaat gcacatgagg tcgcttggca ggcatccaca ttctatggg 120
aatgtctcag cagccagagc ttggggacat gaagaagcaa atgtgtggga gttatggggc 180
aaactgcaaa caatccaaag tcccgaaaa atgcatggag cctcttggc ccaaggatgc 240
tctgcagaac accggcaaag accctgccct tgcccaaatc aatgatagag gcaggactcg 300
gcactgccct gttctttctt actgtgtcca aggccttgaa tcgtacaggc cacttncagg 360
actactgngg atgtgagcca ttaaaagaa ctcaaca 398

<210> 568
<211> 340
<212> DNA
<213> Homo sapiens

<400> 568
atataagaaa gattggagaa ctgtgtgcct ggcaattgcc ttgctgaaag gaagccctca 60
gaaaaagttg ttgatgggtg agagctggcc aagccagaaa gacaaacca gcgactttga 120
gtgggggctt tgtgcacaa ggcatcagta gacctggaga ctgagttcag gcaatcaatc 180
aatcaatcaa tcaatcaggc ctacagaatg aaactccaac taaaaactgt ggacaccaa 240
gtcagctga tttcttggtt ggcaatactc catgcatatt gtcacacatc aatgccagct 300
ggtcaagtgg tagaggacaa taaaagtgtt tcaccttgg 340

<210> 569
<211> 434
<212> DNA
<213> Homo sapiens

<400> 569
catcagaggg ctccttgga atgctagata ccaggaagaa agggaaacctg gttaaaaagg 60
aaaaaantaa aagggaagc ctttgnctt caccaattct tcaaggaacc aggaaggga 120
aaatatttgg gaaaaaggtg gtttgggag ggaaaggaaa aagggccaaa agaaaantaa 180
aaggagggca ttaagtant cccgcttgca aaagcttgg aaaaaagaaa gccaatggaa 240
agggatgcca cgtttttaa aggtccggtg ggaaagaang gaaaaggaaa aaaaatttta 300
agggaaaaag ccgcatgct tgaagaaaa aggggggaaat tantgggaag gaccaggaac 360
catgccaaa ggtaccaagg aaaaagggtt ttctcaagg gaaaattcaa aaaaggcctn 420

tttcccagga aacc

434

<210> 570

<211> 483

<212> DNA

<213> Homo sapiens

<400> 570

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tgatgataca cagcaggaca accagtcctg aaaaactttg caaaattgat cataccctgg    60
tgctcctcct ttaacagaca tggcagcccc tgaattccag atccagcccc gcctcccagg    120
tctgctctat ctccagcctt acaggaacct tgggcgggtgt ctcctgactc aacctgtgt    180
gacaagaata ccagctttcc cccatctctg agcttctaac gtttttatg cctccccga    240
cttcaaaagt gtaagagtt cccatgggga tggtgaaatg ggccattcct gaatggtata    300
ataaatctca ccgaacttca ggcatgcctg tcatcagcca agtcctctgg tggggctgct    360
ggcatttgaa actgaggctt ctcaaatgg atttcaattt ntgcggttct caagtcaaac    420
tttaagttaa tttcaagggg tcactcttgt gtaattagc tttganggg agagtcacaa    480
ata                                         483
```

<210> 571

<211> 676

<212> DNA

<213> Homo sapiens

<400> 571

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agatgggggt tcgcatgtt gcccaggagg ggcctcaact cctggggctt caaagtggaa    60
tcttgcttc cccaacaaca accaaccggg ccttcggggc ctccccaaaa gtggcttggg    120
ggaatgaaca agggaagccc ttctctttt tccaacccaa gccgggaagg gaagggaaga    180
acaaggaatg ccctttcaa gccttggctt gggcttgggt ccccaaggg aacccccaac    240
ttggcccact tggaagaagc ctgaccgaa ggttgggtcc gaagttgcca ccgccaagg    300
ttattgttc caagccttg ggaagaaggg ttgccaaagt ggaccggtg cccttgaagg    360
gtcttaacgg ggcccccaaa atgggcaaga atgaaggggg ggcctcaaat ttccaaggct    420
ttggtcttgt ggggggggtg cccttcctt gggacacaaa gggaacttgc ccaaaccct    480
tgtggttga aatgtgaagc cttcaattg naaaaggaag aacaaggtg aagaaaagcc    540
ccttgaantt gccttgggtg ggcctttaa ggccttgct taaacttgn aaatacaaga    600
atnaaatggt ncccaaaagc caccttgggt ggggcttgtg gaagcctct tcaaacttg    660
gtnaaaataa caaaaa                                         676
```

<210> 572

<211> 390

<212> DNA

<213> Homo sapiens

<400> 572

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ttcaggaact gagtgtctgc cctggtcaca ttaaggagc caactggtct ggccttgggt    60
ggttangtag gaacatttta ancaagccct tcttcnattc ttgggcaaan gtcaaattt    120
ggtaaccaa aagccgcttg gcattcaggg aataaaggaa acccttcaa gccaaagcca    180
accaagtga cctaagcctg gtggaatcct aaatggaata aaccctttc cattttcat    240
```

tttccattaa tttaagaat ttaataatt taccctttct ctttcttatt taaaaatggg 300
gggcctagtt tgcctcatg ggaaggagg tcattaatga aaaattattc ttcttaaaa 360
aataaaaata ttattcaaa atatttttt 390

<210> 573
<211> 606
<212> DNA
<213> Homo sapiens

<400> 573

ggattctacc atcaagaaaa gaggcccaaa ctttctattc attcatgggt gggaagggtga 60
angtggctt ggagtgaac tggtaaaatt ggcagaaacc caacttggga ggaaagcttg 120
ggatttttc acccttgggc cccaataacc ttaccgttg ggccttgcaa aggaagccac 180
ccaaagcacc caagaaatca cattattggg gacctatcac ccaaaagaag aagaagacta 240
cttgcggcgg aaagaccag actattcgaa gaagctggaa gaagaaagaa ggttcccca 300
agtgggcttg aaagccttgc ttgtcttg ttttcttca tcaattgtgg gtgtttgtc 360
ctaccctgga ctgnggggaa aaataaantc gcttgtttgg gttaaagtaa atttaagcag 420
ccaaaagcaa ttgctncca agccgaaggn cctccttgct ttcaaggaaa agaaacccaa 480
aaccacttac ccttgaaag gggccaggcc taagccctgc aagcccctn cctttgcang 540
ggaggcctt cctttgccc ctggggcntg nttntnaca aaaatcgggg gtcttggggc 600
ttcaaa 606

<210> 574
<211> 468
<212> DNA
<213> Homo sapiens

<400> 574

gagattctc cctctgcgt gaggatctca ctgtgcacct ccagccctgg gtcttggtgg 60
gctctgggtg cacttgagt ctttggact gctccctct ggctctgtg ggttggatt 120
cgggcatcga tgtcacacc agcaggaaca actggggcca ctggaggatt cccaaggaca 180
caggttgtcc tttcatgca ggaagaatct gaatcttcc catccagtt ccccgcatg 240
cagcagaata caacacaagg ggctgcggtc ttcttgact ctaaggccc ttggaagatc 300
ctgttctgcc aaaatcaggg tgattgggc aagcatcctt agggctctgg accttaatt 360
ctttcttg gtgattgatt gacatatang ngctctaact cacataagt gnaaaacaaa 420
atgtggggga aaggcnttg anaccaaana caatgttatt gtctgaa 468

<210> 575
<211> 403
<212> DNA
<213> Homo sapiens

<400> 575

aaaaggctaa cattcttgaa aaagagaaga tgtatccaat gggcgcttt tctntggga 60
atcgagctgc cattcangg acattcactt gggccagaag atcgtaccga catggctgct 120
caaacgaagt ccagatgcc acatacctgt gctcttggc gtcataaac tggaactac 180
gcattgtctc cgggatatcc tgtttttaa ttacacaac agatggaact ggctgaaact 240

ggacaacacc attggaccac actgggactt atttgtgatt ggcctcattg ttctgggct 300
gattttgttg cttagaaatc accaggggta ggatgcggat cacaggaaaa cctgctcaca 360
ggaatcaagt tcacttccan gnattcccca ctaaataaac aag 403

<210> 576
<211> 469
<212> DNA
<213> Homo sapiens

<400> 576

ggaatataga gggaatatga atgacatcac agcagctgcc ttggagccct ggagcctgaa 60
gacatttgag atggatacac ctaaggagag gaggagaagg tggcaggcag atttgaaaaa 120
aatgtggatt accattaaaa aaggatttgt aagcaatttc agaaatataa tctccaagcc 180
tcaggaatta ttaccctt acttttaag aactggtatt attatactca taatgagagt 240
cataaattat gaacaagaag aaggttgggt attattattt gtttagtatt accagcctt 300
tcaattccac acaagagggt aacagaaaca aagctgtgag gatacccttg cagtgnaca 360
ttcttgggaa ttttgcattt aacaagggaagg gatcatca ctgnaaatat atttcaant 420
tggnaaacan ctgagactca taaatggnga ttntngaca cataacaag 469

<210> 577
<211> 371
<212> DNA
<213> Homo sapiens

<400> 577

gcccacactg gagaagcggc aggcctccac tgaatggctg aggtccttaa ctctctgcc 60
agtcaatact gtctgcctgt catattgccc taaccttggg gaagacactt gtcaaaatga 120
acagcgacac atgcttctga ctcttaaaga actaacagcg gatcctggaa atggaagctg 180
ggtagtaatg gaagctactc tctacacaa ctgagatttc tgatcccaga ccccaaata 240
taggaataaa tgagctactg aaccacaaaa cccaacacaa ggtcacacac acttgtaaag 300
tggctaactg ctttcattgt ttgcataaa atgtgtattc tgcaaagatt attattaaaa 360
ataaaacaag c 371

<210> 578
<211> 345
<212> DNA
<213> Homo sapiens

<400> 578

aaattccagg ggactaatat tggagaatga accnaggctg ggananccan cctgcaaaat 60
tccaaaaagg acctcnggtt tggtngtct acaaccagc catcgtcang ataacattag 120
actgcgttcc aggtgggacc atgactcaa ggatagccc cagaccaagg gcccgggcca 180
cctaagcacc ccagcaccca ctctctggca tgcctcccac tetaagtcc ctttataaa 240
ccaccttctc cacaggtcga aagtttggaa atcgtctttt aagggcattg aagcttggcc 300
attcccagat ctgggcattt gaataaagta agctctctgt tcata 345

<210> 579

<211> 501
 <212> DNA
 <213> Homo sapiens

<400> 579

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ctacttcta caggggtgag cccagggccc canggnagaa ctngtggccn cnngccnnng    60
ttttnaaan ggcacnttn gngctcntta ctactagagg tencaataca gaatagggta    120
tacgtcgttg ccggctcttc agtcccaaaa agcaggggta tgggccatgc agggaaataa    180
agggntacag aagtggcttg acattatgct tgatggacat gctgtcttca ccccaaaaaa    240
agatgccagc aaagtctaaa actggaaaga gctttggaag atcaccaact taacatcttt    300
ggtattttaa agacggatga ataggtcaag gtgagaaaat gagttcttca gtggcatcca    360
gccccttga tatcacangc cagaagatgg aactactttn ttccancct nttattatta    420
aaaataggct actntctntc atcccacacc ctttctggat atatcctatg caaatgccaan    480
cagaagatct ttgcaactgg g                                     501
```

<210> 580
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 580

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aaaagaaaca tggaaagaag ggtcagggag ttggaagagg agagaacatg acatgcgata    60
cttcacttt cttaaaggca aactacata agacatctgc agcgctgtgc tggtaacgc    120
tagattgggtg gatgctataa tggaaatgga caaagggctc gtgtatcgga tgtaacata    180
ccatgccaag aagccatgta aatgcaccaa gagatcctgt tttgaagtc tctctttaa    240
cacacagaat caaaatggca acatccatga tggagaagga agagggtccc cagcccttac    300
cagccaggag aactcttgat gaccttcaa tggggcagnc atgccttggc atcanaaacc    360
tcaagggagt tggcttttt tccattatgg ncatagtctg gtaacaaatc atctgtttaa    420
aaataatata taactcgagc tcg                                     443
```

<210> 581
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 581

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agaagggaagc agatgcccta caaagcccat gtatagtcac ccaacaaaat gtactggacg    60
actgccatgc accagccatt ggagctacta gctcctgaga agccacatcc tgactaaatc    120
agcagaagcc acgtcatcca gagataatgg gatggagaca ggggtgcctc tgaggctgag    180
gtgactccca tagggatggg tagctaaaaa tgaagcatag agtggcccggt tcacttttca    240
tcttccccct ctctegggat tgctttgctt tgctttacta tttggctcc tgagacaaga    300
agctacattc caataaagct ttctaatgg aactg                                     336
```

<210> 582
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 582

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agaggctgtg atnncctggaa tgtttaatng gntggntgat tggacttatg cctttggtca 60
gcagctcaaa gaatgctaca attcactctt ctacaaagca gacatccagc cttgataccc 120
aaccagaac tctgaaagaa tgaaaatttg ccatctctag caggtggaat tatcagaggc 180
ctctggaagc tgccatggaa acaagctcac taaaggcttc agcaactgct cagatattta 240
attcaccca cagtgaatgt aatccaggca agaagtgtc acaatatgaa aacattgatt 300
agcaggggac tgcattgtga ccttgctggg tacaggcccc actttcttc tcttgagga 360
cgcttagctt gaacattcca nggggaaaga catcaaaaaa gcacgcccac aaaccagntg 420
ggaagctgac caanaaaatc atgggttctg cccgcaggga ggaaaacaca gggtaaatcc 480
ttt 483
```

<210> 583

<211> 294

<212> DNA

<213> Homo sapiens

<400> 583

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gactgaggct acccaacaaa ttcccagcc ttctgcagt gaggtgggag ccaaagtact 60
aaattctgtg tgttgagag ataatgcc aattctgggccc tgaccttat ggcccctgcc 120
atgtggcct gaagaagagg gtgcagtga ggatgtgag gccataggga atgtggagc 180
cattagacag agaagctggt cccagaact ctgcaagaag cagagtcctc cttcatcca 240
taatgaccac cactgaattg acagcacagg aaataaaacg ttactgtgtt agcc 294
```

<210> 584

<211> 66

<212> DNA

<213> Homo sapiens

<400> 584

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nttggacnac tatngtggan ccantgggca ctngcngng aaatgcagag ctgaccaggc 60
atgagc 66
```

<210> 585

<211> 343

<212> DNA

<213> Homo sapiens

<400> 585

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accttgagaa catgcctgga ctaccgtgct ggaggaggac agacacatgg agcatagccc 60
gagtgcccca cccggctcgc ccagcagaaa cggctctgga ccagccacca ccagccagct 120
cccaggcaca tgaaggagtc ccgccaagat cagcagccgg caagctgacc cacagccaac 180
tgcagacgca tgagcaagcc ttaagcagct gaaatccacc aagatcaact gaagtctcca 240
gtttcgggtg ccagtatttc ttgtgtatg cccagaagta ttgtggtct ttgttaattg 300
attaattaat aatcatggat aatataacag atcattggcc aag 343
```

<210> 586

<211> 409

<212> DNA
<213> Homo sapiens

<400> 586

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tgtgggggagc tacactgcnt taagtcatga acngccacct tccgtgacgc tcacagccct   60
tnttgatgct atccagctct tatccacnaa tctcagctc accatggaaa tgcggatttc   120
cccacettca atctgccccca tcacaccagt gatgtttcag ttcactttgc actggttctt   180
ctttccaccc agaacactct tgtgccaggc ggacccacaa cgagttctct aattaccttc   240
aactccttgc tcctatgtct ccatcccaac aaggcctacc cagaccttcc aatcgactat   300
ggtaactgcc tgtctcctcc ccaccagggg ccatctccag aactcccaac cccactatt   360
ttctccact gtcttttctt tatagtactt tatcttttaa aaaggaatg                   409
```

<210> 587
<211> 396
<212> DNA
<213> Homo sapiens

<400> 587

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atgcanaaac cagggccag ggaagacgca gcttgagcaa ggtcaccggc aggccatggt   60
tttgccggag gaggagctac agtcagtctg ccttgagct caccaccgtg tttggcccat   120
ggtagatgcc cnacagaana cacanncgnt gttganggct cctgtnaagg anaanctgcn   180
ntacaagaag gttgagtaac tancccatca ctacagctaga actggccacc ancatggatn   240
ccanatagcc ctactccana gttgcccatt ctattanccg tgacgccatg ctggctgtcc   300
acacccatgc cttttcctg ccttaattct gcaatgattc ataaggaaa gccatattat   360
gacacagctn gaaggcagnc atctgcaagc caggac                               396
```

<210> 588
<211> 410
<212> DNA
<213> Homo sapiens

<400> 588

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accagccaac acttacggaa aatagaacct acgttgaaat attgggggct ggtttctct   60
atacaagagg agtcatgaat atttatgaaa ggagaaatcg cacatgcaca ggatgacctg   120
cctgcagaag gagctaccca ctgaaggctn cttctctgct gagagctgga cactcattgg   180
gatgaactgc ctgtggaaa gaggctaccca ctttgggtct ctgagagct gttctgttgc   240
tcagtgaagc tctgtgcat cttgtcacc ctccaattgt ctgcatactt cattctncct   300
ggacatggga caagaactca ggaccaaag gtgggactga aagagctatg acacaancag   360
ggctcaagat ttancagcca acaacnaaac aaaataaagc acaataaatg                   410
```

<210> 589
<211> 335
<212> DNA
<213> Homo sapiens

<400> 589

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aagtccagg ggctaattct gagatgggca gaccaagcct ggagaccag ctgcaaaatt   60
```

ccagagatta tctcaagggtg gctagtgaac aaccagcca ttgtggagat gatgtcagcc 120
catgctccag gtagactgag acccaagaca gccactggaa tgagacacac agacattgta 180
ttcagtctaa ttcttgcatt ccttccatat caagtttccc cttttaate ccttgcccct 240
tgttttccc cccaaatca aagtgggtcac ttggatggg aatccagcca cttcccatta 300
ctagtttgg ttaataaagt cactttctt ccacc 335

<210> 590
<211> 405
<212> DNA
<213> Homo sapiens

<400> 590
gtgtctcttt gacattgtcc acatctggaa cccagaacct ccttctgcgt cctctatccc 60
ccatcccaca ttctctgcct ctctgctgg aggaggctaa caccaactgt gcaagtctgt 120
tttctacaa gtcacactat gagaagatct gggcattggt tccccatcac ctgggccagg 180
actgactcta tggacctgct cccactcctg ggaaatgcgg agataggatc gtccagtatg 240
cctgctaagg ctgatgttca gattaaatga gatcacagaa gatgggcagc tggttgcact 300
taaaggagct gggaaatgga gccagctctg ctgtgatggg tcttgatta ccaacacacc 360
ttgctgtgga ccttggggca ganggcactt caactccaa ttct 405

<210> 591
<211> 211
<212> DNA
<213> Homo sapiens

<400> 591
ctgtgtttaa caaaggctgt cgggggagtg actatgcccc agagtccacc atgagagtgc 60
tgaagagcca aaggtgatgg acccctctga tgcttcctg ccatcagtga gagaagcctc 120
atgtttatgt attttctatg ccgagatttc actcaatatt taatgtagag gagggatttg 180
gctgtctaaa ataaatacta ttattattt t 211

<210> 592
<211> 397
<212> DNA
<213> Homo sapiens

<400> 592
agatgaagaa attggggctc acggattaag tgacacctat ttatcatatc acacactaca 60
aaatctcaaa cacagtatct caactcatga aacattcggg cctaagatat caagtgcaat 120
ctgattccag cctgtgcatt ttgacaacct ttgactgctc tgccaatcgc caggtgcccc 180
tctccagccc agtcagtcgt ttctggtctc attcataact ctgccggatg cctcattaga 240
gaagtgtcct gagacttctt gtgagatatg ccttctgag acctaccaa tgtgcccatt 300
ctgactccta ccagacagct gagagaccaa ctcagagaag aatagcaaag aaagcagaaa 360
atgggaggct ttatccagtg gcccaatccc tgctagc 397

<210> 593
<211> 420

<212> DNA

<213> Homo sapiens

<400> 593

```
ggacctggga gtgcgacatg gtggcctcag gggaaaaggg ctctcgtcta gaccttctga    60
ctgtcctctg gatcttcctg gtgtccatgc ggggctgctg ctctgngctg gccccagggc   120
ctttggccag tgtccatgag acccggaatt ccagcaacca gtttgacaac tcctacagag   180
aaacaggatc cacataagga tacagcttct tcatatccct gtccatgact tcacctgcg    240
ttcttcaac caaatcaaatt ggtggtcagg gcctcttgag cccaggcctg caccgtatta   300
cattccaaga tggcattgaa agtaactga gggaaatcac caaaaagaaa gtgaaactgg   360
ggccgggttc ctggccttaa ctgatgacat tacctggga aattccttct tcctggctca   420
```

<210> 594

<211> 316

<212> DNA

<213> Homo sapiens

<400> 594

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gagtatgaag ttaacaaac aagagaagat gaaggaggaa aagaagaaga tggaggagga    60
caaaatttc agaagtgtt attagagcta ttacatgcc aatatctact ctgtgggaaa   120
agcaaattc acattttat caactctgta ttctacatc tgatcaagag atgttagaag   180
ccagttcttg agaatggcag gaccaccttg tggacataac ctgggtcggg gaatgactgc   240
acggagcaga gtctacctg tcaagacgtc agattatgat gtgaataagc aataaacata   300
tattttgta actcac                                     316
```

<210> 595

<211> 133

<212> DNA

<213> Homo sapiens

<400> 595

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aanagtgtnt ggcatactat atgctaate aacaggactg cggctttata cgangaggaa    60
nactctntnt ccacatgan aagacacaat gagaaggctg ccatctgcct gccanaagga   120
gagccctcgc tgg                                     133
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<210> 596

<211> 397

<212> DNA

<213> Homo sapiens

<400> 596

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tctgtgttag attttaacat caagaaagaa cctcatgct tggaacact gggaaccact   120
ggtgaagagc aagagccctg ggaagaatca ggatttact tggcctctgc cactgactg    180
cggcatgact gtggaccagc gacctgcacc tctgtgccc cagtttactc ctctgtgaaa   240
tgaacactca tgcgagatga tggctagact gtcaccaggc ctcctatttg ctagtacggg   300
gccctctttg accagcagaa taaagatgga taggtgttct acctacatac agtcatcaaa   360
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ctcatcaaac tgtgagcagg aagagagaaa agactgg

397

<210> 597

<211> 318

<212> DNA

<213> Homo sapiens

<400> 597

gtaatccaca tgccaaactg aatttaaaat tcttgattt attgtaagac agaaaagcca 60
aaaaaaaaat cacaacgag aattttgat ttcaaggaaa tttcgattg tanangacag 120
gcnctggca aanangnga gggctatgtt aagatnnagg cnaaggtga antgntgtg 180
ccacnagcca agganacca cganccacca caagctggan aaggcaaaga aggantcttc 240
cctanaatct ncanaggaag nggtggcctg ncaccacctt gantntggac ttctggcctt 300
cggnnctggc aaagaata 318

<210> 598

<211> 374

<212> DNA

<213> Homo sapiens

<400> 598

ctgagaattc atttgaata ttgcagata cataaaactc caggtgtaac tccaagcaaa 60
acatgatgaa agagggaatt tggataaacc atggaatgat gacatcacat tgagcccat 120
ctggtataaa cattttgct ttctgcagt accagatgaa ggaaatatgg tgccgtgtgc 180
ttcttcagtg attaattcag gaaagccttt gctgagctga aatccaaaat aggaagaacc 240
caccttcac atgttaaga agcttgtgat cccagggatg aactgcctt ttctcttga 300
aggaaagaag ttcccttga ccataatgcc aaagctacaa acacttacat acctccataa 360
tttgcactg aact 374

<210> 599

<211> 366

<212> DNA

<213> Homo sapiens

<400> 599

gagcttacag tccagcggag gagccaaaga agtaaaaaga gatctgcaaa atgaaagtat 60
cacaagagag gtcaactcaa gatgctattt cccatcagaa cagaagtcac ccttgactaa 120
aaccacaact ttaaacttgg cccaacatcc agtgccttgt cccaggggt gcaaatatgg 180
actgganagg accccaattt atctgcctg cctgaggtc tgggctggga tatagcccag 240
gtncatcta tcttgagggg ccttcagat ggacacatgg acagccagtt ctggtccct 300
gacttactcc tctgtagtga aaacagactc agtaaacaca agctgaatta aactggccaa 360
ttgttg 366

<210> 600

<211> 240

<212> DNA

<213> Homo sapiens

<400> 600

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aactggatta aacaagatac tcttcagac tgtggttgca aaaangcaac acaacttta 120
aaaaatcttag tactaat tttt taaaaatggc ttttaattg ggggagactc gataacagaa 180
cccgaaaatc tgatgaattg tatgaacatt ttgttcagaa aaataaacat atattaccag 240

<210> 601

<211> 411

<212> DNA

<213> Homo sapiens

<400> 601

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ttaatgaag tcacaaggct cacggcagga ccagatcaa aatagacccc aatgtgcggc 180
aggctcatca gtggaagtga cttaccctgt ctcatagag gctttgtact gtggactttc 240
gaggcacatg ggagcctcgg tgaccaggga ccatgttgct attccttatt gtgtaccatg 300
ccagaaggaa atttataat cctgaaatac tcttttgat ggctggaaga aaaatattgt 360
aaattgtaa tacagagaaa atctgctaatt cttgtcaagg aattttggac a 411

<210> 602

<211> 233

<212> DNA

<213> Homo sapiens

<400> 602

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gcggcttccg gttggacaag atggctaccc cagngggctt gttctctc tggtctctt 120
ttctgtctaa gactcactcc ataccagcct gagcttgga ccatgtttt gctcctctca 180
tctcctacc ccagagctg acagatttag caataaaat ttacaagatt ctg 233

<210> 603

<211> 256

<212> DNA

<213> Homo sapiens

<400> 603

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cccagatctt cgtttctgaa tttctcttc cactagaaga aacctgaga gaaatggcga 120
gcctgagatc ctttattgca ccaaaagcaa ggaagtatgg aaggagagct gagggcttgc 180
caggacattg gccgacatgg tctctcactg gtcaaaactg ggatggttgg aacatcaata 240
aagaatatta atgac 256

<210> 604

<211> 290

<212> DNA

<213> Homo sapiens

<400> 604

aaggctgcat ttctcaggca taagctcttg ccagccattc acggtgatta cggaaggtt 60
aagcattgtt gggactcaca aaacagctgt gtaagcatt actaccttg aacgcttcag 120
gaggaaagcc acattctcct gtggaaggaa atagtgcag gtgatacctg ctcccttcac 180
cttctgctgt gagtgggaagc tccctgaagc ttcaccaga agcagatgct ggcaccatgc 240
ttctgtaca gcttgaggaa ccatgagtta aataaacctc tttctttat 290

<210> 605

<211> 404

<212> DNA

<213> Homo sapiens

<400> 605

gctgctggtc tgcaagtcca gggaccatac ttggagtagc aagccccag ggaaggacag 60
actttaataa gaagaggatc ccctatgaaa attccaactt gagctcctt gtccattcag 120
acattcatac aaataccaac tgtgggccaac aactgaaga ttccagtgc ctatccaga 180
aatctgact cctgttctg ccaactcct gctctgctc atcaggtaat tcccagcaaa 240
aggcaaagtg tctccatgag tcaactctgc ccaacgctta aatggngttg gcttcttagc 300
tatgacaggg acatcacaga gcacctggtt gaggtgtca ctctatgaa taaccagctt 360
tcggccaaat gaaagacagc accaaagtca tcaccaactg actc 404

<210> 606

<211> 402

<212> DNA

<213> Homo sapiens

<400> 606

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aatgcctgga tggaaattca ctccagaac cacatcttca ccacaacat tgctgtcagg 120
gctctccagg ttaataacct ttgctggtgg ggttctccan aatcagctgc caaacagag 180
tctgagtttc aaggtaacta ttaggatca agcctgttg aagacacagg ggaagctgaa 240
ctgtgagggc agccacaga agcctccct gcctgcagg gagctctgga gtgaatactg 300
ttctgtccac cagagctggg cccagtgagg caacaagac caggccttg caccaccacc 360
tactcaaca taaagctgtg tgggtgtcc taagaagggg tc 402

<210> 607

<211> 401

<212> DNA

<213> Homo sapiens

<400> 607

gcaaaacat caacggatgc tgacatcagc gagcaaaagt gtgatgaaga acggcgattt 60
gcatcgttc aaagtatctc tccatgagat acttactaat tcaaagggg acaatggcca 120
ggatgaagcct ggcagatgac acttactg agtgatccat gttgccatc ccagggtgac 180
acggngtgcc tgtgacatga agcgccaagg ggaaccaat gtcattctg gggttcttc 240
tgcccaaac agtccatttg gttaaactca cnagagtgtg tgctgtcga ttagctgat 300
tctgtatggg tggggatttg gaccaccct tactactca aagtggggc ttgtacacca 360

gcagcagggt tacctcctta accccgagct tgtaagaaag c

401

<210> 608

<211> 242

<212> DNA

<213> Homo sapiens

<400> 608

ctgagattta cacggaacaa ggagggttgg ctatcggtac atgagagaac gttaccaag 60
gacaaagaag ttacacagac ttccctgga ccctgttgg tgccagatg tctgcggtc 120
cctgtcactt aaatataaaa gacaaggcaa agctcgcata attctaagat ggttcttag 180
gacattgnc tgcttcttct tggtttctg gtccecaaa ataaagtcgc ttccttcct 240
cc 242

<210> 609

<211> 284

<212> DNA

<213> Homo sapiens

<400> 609

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aggagagatg gctgccactc caaagaacaa gagccagagg gggatttgag ctggaaccta 120
caaagccctc agaaggcatt cgatgcctca ctggaatgcc catcattca catgtcccca 180
gtccccactt atccccctcc actcctatga cactgctggc ccagcatggc gtgctacata 240
caggtgggaa tctgtccata tcaataatcc aaaccatctt ttcc 284

<210> 610

<211> 157

<212> DNA

<213> Homo sapiens

<400> 610

cttagaagcc ttctgcttga aaggacgctc acagcccttn ttgatgtnat ccagctctta 60
tccacgaatc cttcagcttg accatgggna atgcggactg tcccccttc gtagtggcnc 120
cagttagaca ctatntttt aaaaataaaa aagagca 157

<210> 611

<211> 345

<212> DNA

<213> Homo sapiens

<400> 611

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gtacagagaa aggagcttgg aaagaanatg ctctacaggg actttaatat gacaggctgg 120
gcatacaaaa ccattgagga tgaggacttg aagtcccccc ttatatatgg agaaggcaag 180
aaggcccgagg taatggcaac tattggagtg accagggggac ttggggacca tgacctgaag 240
gtgcatgact ccaacatcta cattaacca ttctgtctt cagcttcaga agtaccgcat 300

gangtttttg ttatatattt gngcaataaa aacattttca gcggt

345

<210> 612

<211> 429

<212> DNA

<213> Homo sapiens

<400> 612

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aagcatgctg ggattgattt gtgatgtctg ccacgaatat aagattggcc atttggggca 120
tgaatgctat tcatggattg gatctcctaa gagcccgaat ttctgagaaa cactgaaga 180
cctgaccca gcgcttaatt atttctcctt tccaagcacc tctcatggaa ggcattcttg 240
atgaaaagac ctttggcagc gtgggttttg caggttgctg gagagccagt gggattgcat 300
ctttgcaga ggacaggctc ttaagggcaa aatcgcttaa gagtcaaaat ggccttgaaa 360
attccttggg aagccgtcat gttggagcca accactattt ctcaataatt tcagcacaag 420
ccagttttt 429

<210> 613

<211> 418

<212> DNA

<213> Homo sapiens

<400> 613

cacactacaa gggcttcaca gaaaacactt gatggaatct tactagacta actgtatata 60
ttctgagca cactccaaga cctgggagag gcagaaagaa agaagaaatg caagtctaca 120
atatgagata caaagtttga atttactggg aaagcaaaga gaacacatcc gaacaaaata 180
agaagaagaa atggtgtgag tattgttgca ttgcgaatgg aatggagaac aatgaaatga 240
gggctagaag ccaaaccgag ggtgaagatg gtcaaatga ggaagataat ttatctttaa 300
tcaaaaatat aataatcacc agaataataa taaccataag aggtcaggaa cagaagaagg 360
gtgaaaacag agtcaacctc aaangcaaac ctagtaccac agaaccaggg atggacaa 418

<210> 614

<211> 362

<212> DNA

<213> Homo sapiens

<400> 614

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atcaccagaa gaccagcatt aaaagaaatg ttaaagttct tcaggcagaa gaaaaatgaa 120
accagataga aaaacgtatc tacacaaaga agaagagcat cggatttgta gtcactcaa 180
tgcttctca tcaggaacct agaaagctgc taagaatcca tctcaccag catcaaattc 240
cacagcccta atgnatccag atatactcag aaatctacaa gtcattgtcaa cttctatgtc 300
tttcaattgc ccaaactct gtgccaggta ccatgggaga tgaataaac atttcaaca 360
tc 362

<210> 615

<211> 195

<212> DNA
<213> Homo sapiens

<400> 615

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cctactcaca agaagatggc aaagatgaag acttttatga tgatccactt ccacttaatg    60
aacagctgaa gccccttcac cttctgccat gagggaagc agcctgagga cctcacaaa    120
ggcagattct ggtgccatgc tcctgtcca atctgcagaa ctatgagcca aataaacct    180
tttctttat aaatt                                         195
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<210> 616
<211> 170
<212> DNA
<213> Homo sapiens

<400> 616

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gagctgaaca ctgccccgag aatgcaacag aacttcagct ctgtcccagg gtcgtcagcc    60
acagctccaa gtttcttagc atcagctttt tctgaacaaa atagtgcac ctgctggaat    120
cactactgta aactgagtat aaaggaaaat aaaccctctt ttcttatcc    170
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<210> 617
<211> 98
<212> DNA
<213> Homo sapiens

<400> 617

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atgcagcant aagatgcnat cttggaagcn caagacggac ctctctntcg ngagacatna    60
aacctgccag caccttgatc ttggacttgc agcctcca    98
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<210> 618
<211> 270
<212> DNA
<213> Homo sapiens

<400> 618

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gaaaatctct cacaagaag tcattccta gccactgtga tatttgccac atgggatttg    60
agatttcaga tgaagtcctt atgccccgtg ctggctgggg agtgtggact atgagcatga    120
gagagagctg ctttctctgg gaacaagaac tgttggtca tccataggg tctggtctgg    180
ggtctggcac agcgtttcc tcatagtgat gtcaagaaa tgttgctaa atgaataaat    240
gagaagatgg atacagactt attaaaatgc    270
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<210> 619
<211> 418
<212> DNA
<213> Homo sapiens

<400> 619

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gttgtccca tattttccat aagagagaca tgtgtcggct taaaagaaat gaaactacaa    60
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tgggtgtgagg gaggaatctc gtgattgtta gcgtatattt tctgcattct acctgaaatt 120
 gtcaacgaag tgtaggaccc aggtcagtgc ctgttcata gtaggtacct aactaactac 180
 ttgaaagaat gaacatcact atgaggaaag tacaccatag tgaccatttt acagatgagg 240
 aaatggaggc acagagaatg agatgttgta atgtgcacag ttggagagac cactttctgg 300
 cactcggata tgcaatataa tttgaaaaa ttaaactaca tgctcgagga aggattcaac 360
 attttccgga gaaccccgagc attttccctc agaagactaa aattagatcc tgttttaa 418

<210> 620

<211> 423

<212> DNA

<213> Homo sapiens

<400> 620

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 ccacctgcat acacatggag atggactcat cctccagcta ctttgatac cgtggctccc 120
 attttctac ttctctgaa ggattgaagc caccttgccc agaagtcacc gggagttagt 180
 cctcctccct aaggatggcc cacagccagt gcctcatcgg agcaagaggt acagaagccc 240
 tgctccctca tctgaagatg gggcaggctc cgcagtgcaa tccatgcacc cgagctccca 300
 tggcatcaga ctgacattgc tggaaagccac agtcttctc agcttctct tccctgtcct 360
 gcttccctca ctcccttag gtttctctc gagggcactc ccttaataaa tcacttgcgt 420
 caa 423

<210> 621

<211> 205

<212> DNA

<213> Homo sapiens

<400> 621

gttttctc caagtcttga ctgagactga gtctacatga caccaaaaca ccaaacgaa 60
 aaagaaaaat tcaattgaac cacttagatg ttcttcacc aaatccagat gtttggcagt 120
 gcagataata ctctggata atgagtgact cccctacaa tcaacacttt catcacactg 180
 cttaataaa aaaaatagtt cccat 205

<210> 622

<211> 418

<212> DNA

<213> Homo sapiens

<400> 622

aaagaaaaac ctatggaaag atcctgtgct ggaagaaagc atgaagtaat tcaaatgact 60
 aaaaggcttt aaacatcttt gccatcattt ataatgcaga cttcatgctg agaagagcac 120
 tcgacactgc caccgaagtt ctgtttctgg tgtgttttg tcaattatgc tgatgccacg 180
 ggaccatgga acagtgccac tatttccaag agcaacagca aatcgaaaaa tcttcatgca 240
 atggtgttc tagaaaagtc tattacattg gtttatgctt taaatatagt taccaccaga 300
 gtagtaattt tccaatctat cctttaaag ttcaagtgtt ttattgcatt ttttaagttg 360
 naaaaaaat ggatggtncat catatcctta acatagnata taaaagcact actcaata 418

<210> 623
 <211> 156
 <212> DNA
 <213> Homo sapiens

<400> 623

aaacaatatac tgcctcttggga gtcactgccca ccaaggggaat aactttacct ggaatatgga 60
 ctgggagctc aagccaaaag catggacaag ggagtcaccag attacaggat actattatga 120
 cttttgcata aatataaaact cctattagat aaattg 156

<210> 624
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 624

gcgtgaaaga cgctgaacaa atccctgtca gctgcacagg tgtctttgta acacattgcc 60
 agttagcgtg acaatgcacg ggaagcagct atgctccagg ttgtgctcca gctgctcagc 120
 attgaccctg ccccatgccc tctgaagaag cagctttgcc gaaagtggag ggccagcaaa 180
 gaaggaaact gaaagcaggt gtccagggtga tgaaattggc acagaacacc aaaggatgga 240
 gctgagattc atgcttgggc tgctcccca caatccctc acgttgaatc caaccctgac 300
 ttttgttcc caccgaggaa agaagaaagc caccacccc agtgaccatg gcctctaact 360
 gctctctctg cctgtggaaa gccagtggtat tgggctagga tacaatgcc ctccatgat 420
 ttt 423

<210> 625
 <211> 263
 <212> DNA
 <213> Homo sapiens

<400> 625

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 ctgaaaggaa agcaaagcac tcttcattaa cagctagtgg gtcctaatt tctgcccatg 120
 aaggcatgtt catactgaca gagcaccccc tcaaggggaa gaaccatccg cgtaattct 180
 tgttgctc tcctgageta gtgtgtcat tgtcatata aactagtgtg tcaacattaa 240
 aacaaaaagg gagttgaatc aat 263

<210> 626
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 626

taatacacia tattggcaac aatgcaacaa aatggacaca ctctactctc cagcgggagt 60
 ttcagaaata tgccataatg gaacaagata actaaaagaa gaaaactacc tcaaggtaa 120
 aaaaacgaaa agaagagaaa gaaaaaagga aagaagcaga aggaagaact ctgctgcagt 180
 actggaagca ggcagattat ttaaattacg gtggtgccat ggaacaagag aaggcagatg 240

aagagcgaca cccttcaagt taacacagga acaattaaca atagaatcct taagatgcaa 300
aactccttgc tgtttaccag caccagaana gaggaagaag nggntctggg ggaattgcgt 360
gccantctgc ggcaggttgg ctggaaaanc anccctgggt ggagcttgg a 411

<210> 627
<211> 121
<212> DNA
<213> Homo sapiens

<400> 627
aattgtatat ttccacatat gctggacaat aggcagaaag tggagacca aagaacttgt 60
gatatgacgg acatgagaag cttcagttgg cctcaaatgt caaataatat ccttcctgaa 120
t 121

<210> 628
<211> 196
<212> DNA
<213> Homo sapiens

<400> 628
gattagaggc ctctaaaaa gagtgtcttc ggagctcact gtcttcagc catgggagaa 60
tatagcagga aggaagcagt cttcaagcaa agaaaagtgc tcgtgaaaga agagctgaac 120
cctgctagaa tattgatctt ggacttcca gcctccagaa ctgtgagaaa ataaatttat 180
gttgtttaaa ccatgt 196

<210> 629
<211> 161
<212> DNA
<213> Homo sapiens

<400> 629
gagcagatac tcagctgaga aaagtacgaa aacagatctg caaggacatg cagtggaaatg 60
tgagtgtttt ggctgggaag ctcacaatga agaacaatt gcaccacaga atggctggaa 120
aagttaatta aagcaacctc accaataact cagccagtaa c 161

<210> 630
<211> 444
<212> DNA
<213> Homo sapiens

<400> 630
cnaactgaga ttttacacaa tgtgtcaaa ctgtgctgga agatgacctt tccaagaat 60
ggggatgatt cattctctg ggaggaaaag tcctattggc aaaggattct tcttccttg 120
tatacatgtg tcactgaaga tcagaacctg cactctacgc acaaaagcaa cagatgaatt 180
ttacagtgc tataagtttt aagcatatag gaaagaaagt ggaacagtgg ncagagtctt 240
gggtttggcc tcagcaaaat ggtgcttaan agtgacagcc ttggtgntaa cagataatt 300
tcaaaactca caaaaccatc aatatnangaa tcnttgngt gccattctc atccattggc 360

aatggatcag gcaactgtta gctattctaa gtgaaatTTT gtgaaattc aaattcagtg 420
ctttttaac caatattaa agtg 444

<210> 631
<211> 421
<212> DNA
<213> Homo sapiens

<400> 631
gtgggggtctt ncatgagana cncataagcc tcctgnnana nctnccanaa ttgtcaggat 60
tctncaagat gatngggcng anggtatttg aanacantga gttnnggaggg ggcacacagc 120
tggagaaagc tcaaatgtcc tgatgccaan aagttcattc atggaccatc caccctnctg 180
tccacacacc cagtggacgg agacagctgc cctctgctaa ggattccgc atgggggaga 240
gcctggctgc tgtcgagcag tccccttct cccacctctt ccaactaggc tcttgagaat 300
gtcagctacc acacagccac agctaccaca cacctgcttg aagaggagac accaggacac 360
ccatcaaaag ccagaactgg catctnccct gtgggaagtt cttncttgtt taacctcaat 420
c 421

<210> 632
<211> 246
<212> DNA
<213> Homo sapiens

<400> 632
aaactgaggc tctcccctag actgtgagca gcaaaaggaa aacaacccca cctgccttga 60
ttcagatgtt ctctatcac cagcacagt cccagcacgt gggaggtatt caactgctgc 120
taactgttga acaaacaccgc cgggtcatct gcaaaatgac tgtcctggac tctcaaaaa 180
tgtcaactca tgggagaaaa aaaggctggg gaatcattct tgattaaagc acaccaaaga 240
gacatg 246

<210> 633
<211> 165
<212> DNA
<213> Homo sapiens

<400> 633
attggactac tagagtgaag caaattgcc aattgtggag aaaagcaagc tcacaagaaa 60
gagcaccata tgttgtattt taagaaactc ctatctttta aatatttaa tacagtgtt 120
gaaccttatt tgtattaggt taataaaaaa acaaatttcc atttc 165

<210> 634
<211> 323
<212> DNA
<213> Homo sapiens

<400> 634
aatgtttaca ctggaggtcc agagctgccc tgtaagaag ctcaactacc ctgaggtcac 60

catgatgtca ggaagccaaa ctcatggaa aggccattaa gtgggtactg cacttgacag 120
cccagtgtca tcccagcaa acagtcaaca ccaacagtgg gagagtgtc ttgaatgtct 180
acaccagtct aatcttcaga ggacagcagc tccgtgacat ctgactcaa ctgcttgaga 240
gatcttatgc cagaaatacc cagccaagct ctcccatcat tctagcccc aaagaattnt 300
tagcaaaata aaacagttgt ttt 323

<210> 635
<211> 105
<212> DNA
<213> Homo sapiens

<400> 635
aatcctgtc tngagcatnn gctnnacct tgtgtaccna gtcactctgt tgctgctgtc 60
ggtagacatg gcttcccaa ggaaataaat tacatttcat tctct 105

<210> 636
<211> 414
<212> DNA
<213> Homo sapiens

<400> 636
gaatgaagat aaaatcaaga catcttcaga tgaaggaaaa ctaagacaat ttgtcatcaa 60
cagaccgact ctaaaagaat gttcttccaa cataaatgaa atgaattaag aaggaaattg 120
taacattaag aatgaagaga taactatgaa aagagccaaa aaatggatca ctaaaacaaa 180
ctatctttct tctctgagt ttctaaatt atattgagac agtcaagaa aaattacatt 240
gtctgatgtg gttctcaatg taagtagagg aaatatttaa gcaacaatga tataaagaag 300
agtgggtaaa gggacctata tccagataag tcttctactc ttacttgaa gtgggaaaat 360
gcccctagca gagtgtgatc aaaatataaa tcagattata tcactttctt gatc 414

<210> 637
<211> 386
<212> DNA
<213> Homo sapiens

<400> 637
aaataagtat ggaaggagag aggggattat agcagagcga atagtgtga agtcttggtg 60
gggacattcc gatttaataa ctttggagac agaggatgtg ttccagctca cagacttca 120
ggaataatac tggaattga catctaatca gcattttatg cactataatt gtgtaaactt 180
ttaggcctgc tgtacaataa tcctccctg ctgtgtggtg agcactttgg ggcctctgg 240
atgctagatg tgatatgaat gggaagcatt attattattt atgccttata atatgtcaac 300
tctatgtcct ctgccacaac ngacacttat tcaaatgtg cagtaacagc cccaagtga 360
tgtattggca aaatattttt gaaacc 386

<210> 638
<211> 185
<212> DNA
<213> Homo sapiens

<400> 638

gacatcaagg gctccagaca ttgagaaatt ttcccttaa gttgcatgg gaatccagaa 60
aacgccatat ggaccctct atgctgtgaa atacttcagt actcaggaga agtcacgttc 120
tggttgctgc aagcgtgtga taccctgtca ttaaaataag aaatagattg ttatcctctg 180
ccaag 185

<210> 639

<211> 93

<212> DNA

<213> Homo sapiens

<400> 639

cananctgtt nnntcaaac tgatnnnggc nactgaccc tgaaaaatgg ctgagctaaa 60
ataaaagctg tgttataac gctgaaacga aat 93

<210> 640

<211> 267

<212> DNA

<213> Homo sapiens

<400> 640

gcctcacttg tctctcagc tatcaagata actgttgggt atgaaaactg aactctgtct 60
tagagggttt cttttccag aagatgcag tttggaattc tgcaagaact cctgatcact 120
ttaaatccc aatgccttta tttcaagat gtacagtctc tgtctttat caaatagagg 180
agcaaatct attcttcaa aaaaaggaaa aatgcacaat atccaaataa atttcccca 240
gctgcttct ggatattgga attagat 267

<210> 641

<211> 324

<212> DNA

<213> Homo sapiens

<400> 641

gcccacatag aaaagctgtc attggcctcc gggtcaggca agagatggga ggtgttcaga 60
gcagcaaacc ctacaagatg ttggaggcca ttcacaagca agcgctgct tggaataaa 120
cgtgggataa gaacaatgaa ataattgat gaggaaagt tttgtctaca tgaatactc 180
acgtcacaaa atgtgcttct acattatgta acttcatgg tcaaatgact ggtacattt 240
attcctgtgc taattgtca attctgtcc aagnggaaag agtctaact gactttcaa 300
aaacaaaaca agacaaaaca aaac 324

<210> 642

<211> 311

<212> DNA

<213> Homo sapiens

<400> 642

agacgagggg cctcgtatc ttgtccaggc gcgtctcaa ctctggcct caagccatcc 60

tgctctccag cctcccaagt agctggaatt acagaaattg aagaatcagt tccagagaga 120
 tctcctggag ggcctaggat cacagagcaa agcagaaacc acagctgtct cggaggacga 180
 aactccagct cttcacccag agatagtcgt gggctggtgg cttcagggcc cactagggcc 240
 ttgttatga gttttctctt cccagcggtc cttttattgc ataataaata aacctgac 300
 agaaataaaa g 311

<210> 643
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 643
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 taggtcatct ctggcattac ctgggaattc aagttcagcc ctgcattctc cctctgggca 120
 attctggtag agaccatgag gcaaccctg ggaggagcag tagccataac aggatccccc 180
 cacagcaacc ccagggctaa gaccagtggg tgcaaaacac cttctttatc aggtgacgcc 240
 atgcctcaa ctctgcagt ggtcaatatg gtcaatatta agttcacaaa catgggaact 300
 tcctgacatc atcacagaag gaatgaaaat gcagttgggg tggctggtac attttaaata 360
 aaggctggtt ctctggggag ggaaaagggg ttttttt 398

<210> 644
 <211> 281
 <212> DNA
 <213> Homo sapiens

<400> 644
 atcatttact ccaggaaga ccagctgcca tgtcacgtgt agtcttatgc agatgactac 60
 atgataagga actacagcct cctgccaaca gccatttaca ggtaatagaa gggagccaga 120
 agcagttctt cattgctaca ccagaccag aataagggtg gactcttggtg atcatcctcc 180
 ctttctcaag agctggagac cagatcctac tgaagagtcc aggcctacc atgtatgaac 240
 aagggttaact ttggaaaaat tattaaaact ttccaggcct c 281

<210> 645
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 645
 gtttgacagag aaccagcagc ctgacaacca gccatctctc ctcttgatac cagtgttcaa 60
 gcaggctgaa ggtcagaatc ttggcagttt gtttctaga atatacaaca tcagactgtg 120
 cttcttaaaa gtccaggaga gttcttctac gagaagattg gaacttgata gagcagaaga 180
 tcagctgaac gctggaagac tcaccagtgt gaaatgttta ttctaggat cttctgttca 240
 accttgagac cttcagagtc ctatgtatag tcttaaactg ctgatctaaa aatggtgctc 300
 tgtttcagca ggtaattaat gatgttacac attttaataa aatttticag ctatgcgct 360
 acct 364

<210> 646

<211> 403
<212> DNA
<213> Homo sapiens

<400> 646

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gacacacagc cctctgaag aaataactca caatcttct gtgcccggct attgccagac   60
ccttggtgta taggagaatg gatgttagct gactgcaacc ttggcgttat cagtactgcc   120
tgtggccctc tccagcacac agcacaggcg ccgtcctata acatccccag caagccctca   180
ttctttgca gtggctcctc cettgctgac ctgcccttg ctteggtcc tcccttgctg   240
acctgccct tgttcggct cctccctgc tgacctgcc ctgcttcgg ctctccctt   300
gctgacctgc ccttgcttc ggtcctccc ttgtgacct gccctgtgt tctgtgctat   360
gcacatttc tactttctc aataaatctg cctttctta ccg                       403
```

<210> 647
<211> 428
<212> DNA
<213> Homo sapiens

<400> 647

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gttgctatga cagccaggaa ttgcgaacc aaaccagacc tggagaagaa gtctctctt   60
ggcccaaaaga gtttcagtt ccaagtgggt ctgctcatgg ttctgttgt cttcttgac   120
acctgccaga tggaagaacc tctaaacctg ggatttgga atgtccaac agaaaggcta   180
ttccaagct ggctgaagct tggaaataaa ttcgacggaa ttaggtgtg atagaaggaa   240
cttcttgga agaaaagctg gaaaatatta caataggctc cagagagaac ctctattct   300
tctgaaaaa atttctatat ttgttagtg ttctgtggt tgctaagcac attcacataa   360
attatctaatttgatcttca catccgctg gtgaaggagt aaagataggt ttcataatat   420
ttgaccaa                       428
```

<210> 648
<211> 26
<212> DNA
<213> Homo sapiens

<400> 648

```
tgagtggaag cagcctgagg acctca                                     26
```

<210> 649
<211> 161
<212> DNA
<213> Homo sapiens

<400> 649

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ccctgctaca tctctctca agatagaaag aagaaaccct aaacacagag aatgcaagaa   60
gcagaagagg gcccatctt tacagcgatc agctagcaga gtcaaaaagc ctgtgtggag   120
tttcaacaa agcagaggtg caatttctt tggaaaaaaa a                       161
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<210> 650

<211> 295
<212> DNA
<213> Homo sapiens

<400> 650
gcacatctgg ataaaggcag aaacaaagta acaagggagg aagtcaccagt aaaccaatct 60
ttttctccc aaacacatat ttggggctg acatcatagc cacatggcac aaactacaga 120
tgaaaaagta tctgaactca aatccggaaa cttaaccttt atcagatgaa gacaagaaag 180
acttcagcag gcaaaactcac acctgttggg ctgaggagct agaaatcaac aaccaaatac 240
caacattact gctctggaaa taacttctgt tagaacaata aagtaagatg agggc 295

<210> 651
<211> 409
<212> DNA
<213> Homo sapiens

<400> 651
atctctctta ceggggggatg caccaaagcc cagctgttca gtgtcaatgg ctgccagctc 60
ccaactacat cccacacaga cgggagccac ctcaatgtct gcgagatttc ctgtccctcc 120
tttcaatcc catcaaggca cctctacca atgactgatg gatacaggga tacaaaagcc 180
cagacaccta tcttccaaga ggaaaaaact ctgtggtggt gccatttatg ttccagagca 240
actgcgggat caagctgagg gtggactcca gctgaaacca catgcaacag actgaatgct 300
tgtgccctcc caaaattaat atgttgaagc tctaaccga atgtgatgat ggtattaggg 360
aggtaattgg gtcataaang nggatcccct gttaatggga ttgcactta 409

<210> 652
<211> 309
<212> DNA
<213> Homo sapiens

<400> 652
gctcatagat ggaaggaact tgccttgagt cccagtaag acactggatt ttggaccttt 60
gaatcaacga tggaaagtt nctgaggcct cccagaagc agaaaccgct atgcttcct 120
tacagcctgc agagccgtaa atgagagaaa atgcaactgg aaaactggct tccattctaa 180
gatatttaag caaganaaat aatcatagtc tacataatca cagaatagct tggaagaaga 240
tgctactgag tatgttacac aggagcttgt gatcaaatgt aaataaacag gtaacatgga 300
cttgggaaa 309

<210> 653
<211> 434
<212> DNA
<213> Homo sapiens

<400> 653
atgtctcaag gaagtggatg ccaggaatga tgaatcactg aagcctgttg ggggatccac 60
actcgaggca cagatcatc aatctttgag agtaaaagga tggatcaaga ccacaggaaa 120
gaagggatga agctgtggag agtgaggatg aggaacattg cagatgactg gaggccagct 180

ccctgacctt cccctactgc cactgctgca ggccctggtc aggggaagta aaactgacac 240
tagctgttta tcatgcttta agaccagaaa gtaaatgaa aaccattacc acctctcagg 300
atgcaagaag gcacaagaaa ggactaaacc agtgaagat gttatctcaa tggaagaagg 360
aatcctaatt aaattgaagt cttaacaaaa agacgggtcta ttccacaaga ctgatagaga 420
catatacttg atga 434

<210> 654
<211> 407
<212> DNA
<213> Homo sapiens

<400> 654

caccangata actgatccaa gtcacaagca aacactcaac ggaggatgag catccatcca 60
gccacctgtc ttgctgtgct ttggagggtga cgcctggctt ntcccagcag cgctgatgga 120
tctgatgggtg attcatacc aggttgcagc cttagtccc gtcacagtgc ctggggaatt 180
ggccaccgtg gttcaatga ctgtgtcccc gtcttcancg gtgaggaggt aactggtggc 240
acccggcact gtagcccat ctacagngat actgttctg agttttgaat atgcctgac 300
aatagtgggt attcaggag ctgaaagagg ttttagagtt gtacattaac caanatacct 360
acgaggatga ctctttcat catttactc tcaagctaa atctata 407

<210> 655
<211> 234
<212> DNA
<213> Homo sapiens

<400> 655

gtcngggag actttcatct tcaaacttg agagagagct gagaagcctc ggaaccgtcg 60
ccccctgcc cccaaccac ctccggatc cgcgaaacct acaaaactgg atcaccagcc 120
gtctcacgcc actactgcct gtgccaagaa tccaaactc tactgattc aagcctgtct 180
ttttccaaa gaaaaagtc ttactaacc aataaacaag ctgcttccc tagc 234

<210> 656
<211> 422
<212> DNA
<213> Homo sapiens

<400> 656

cacnacctgc attaagtnac naactgaggt tgatcccagg agaaaacatt ctactcctca 60
gcatgggtct tgcctgattc atttaccac tatgacactc tcaccagag gcataccaag 120
aaaggaactt gagaaaacca ttccagttaa agcaagtga cccggcacag tccaaaatcc 180
gtgctatgca gcacagtcca aaatccgtgc tatgcagcac agtccaaaat ccgtgctacc 240
cagcacagtc caaatccgt gcagagctcg tggcacagag gaaaatggac ataaggtagc 300
ggtaacaggc tggcgactgt ggcttttaca cattgcttca cacaacctg tccaggagct 360
ttacacactc actaaacaaa cagaagacac catccaatc actggagccc cggttgataa 420
at 422

<210> 657

<211> 333
<212> DNA
<213> Homo sapiens

<400> 657

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acgctgtgct tggctctacc taaaatacaa aatcaagacc acccaggccc tgctctaagg    60
aagtcactct ctgaaaaggg acagagacat gctatcagga agaaaactga atatccttac    120
attgtgaggt cagatgtatg gctttcattc tgaatgcagt aacttcaa atgtagacacgt    180
gaacagaaaag ctttgaaca gaaaaacagc attgtttcgt tagatgacta tagatagtat    240
ttcataaaat acaagaaaaa cactcaaaat tagctccaaa aaatgtatga aaggtgatac    300
tctgatattt aataaaactg aacctctcac aac                                     333
```

<210> 658
<211> 411
<212> DNA
<213> Homo sapiens

<400> 658

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ggacaattgc ctttgaatga agaatgacag agctctggtc ttcgctgacc ctgcaactc    60
ctgcagcgta atccatggca actcgttact acggcaacca aggaacatgc accagaccag    120
gataaaaccg tgaatctga tgcatattt tcataagaca taattgcaaa tgatattcta    180
aagcagattt gttaaacgtg tgatctaaat tataagttaa gttggaagtg attatgaaac    240
cttcattggg actaanaatt aagggtctgt gttcatgcac tcagtgattg ngttcatgca    300
ctcagtgatt ttattgagca cctactatgt gtggcacacg gagatgaata agacatagnt    360
tctcatgnet attctcccc tcagccccc tcacctcttg aacagacata a               411
```

<210> 659
<211> 398
<212> DNA
<213> Homo sapiens

<400> 659

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tcagaaaaaa agtaaccaac tggcccaaac agcatgaaag aacaccaggc aaaaaataga    60
agaaatatac cgtatcatca aaaggtgcgt ctgagttgaa gtctctgttg aaaaactgct    120
tattagcctg aagaatctag cagggtcatc agaagacttt tcacaccagc ttggttcagc    180
tgtctcagat gattgtactg ccaagaagct cctgtgattc ccagcttggt cccctttgta    240
gaaggccacg tcttcttaac ctaggaataa atgaaactga acagatgcct atacccctt    300
gtgatatttt tctgtgacac ttaacatact ttgaaaagac cagggaaatg ttctatcaa    360
agaataacag atatatccac ctgaagcgta tcggcata                               398
```

<210> 660
<211> 211
<212> DNA
<213> Homo sapiens

<400> 660

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caaactactg ctttgtccat gaacaccttg tcaacttcaa agattcactt ctgttgaaa    60
```

taaacagcat gagcagaagg ctgccaagtt acagaaaatt tgaagattct tgaagattct 120
 ttgatgacaa caagcttggc aggggtggctt ctgtatgttg aagtgtgaa aaggcngatt 180
 ttaanggggtt ttnaatggaa aaggggggga g 211

<210> 661
 <211> 86
 <212> DNA
 <213> Homo sapiens

<400> 661
 ataanaaaac caggtntgcg gggaaattga gacttgaact cangnctggc ggactgcnaa 60
 gntgacacct gtctgtctaca agcaag 86

<210> 662
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 662
 ccattgtctg ggagttttgg aaccactgac tgactcttcg agcaccaggc tttcccttg 60
 gtcctcagca ctgggtgggg agccctacat ccagaagtc ttgggaaaca ggggtggagcg 120
 gaatgccta tcacagccaa acaagactct ccaggaggaa atacagcaga gacctgtctca 180
 gggcttagca aacagtgaca aaggtgaggt gaagccagtc tggacgcaca ccagttcggg 240
 atgatctgag gaatgtcagg cagtcctat atcctcagat gtgtncctat ccacctggca 300
 catgtctgga acttccatt 320

<210> 663
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 663
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 gatgtcttga tcttggaact cccagccttc agaactggaa acagccatga caaaatagag 120
 gatgaaaatg ttcaaaagaa ggggataact gatgaggagac aaaagaattc cactggaaat 180
 ggcaactaca gctggaagag tgaagatctg attaaggaag ggctggacca tcagcgttcc 240
 tggcattgct ttaccccaa caggacttga cctccagtat ctcttttcta ttcacctgt 300
 accagctgct gtctatatgg gctgaaattg tgtctggtt tgctcatcat ctatagcat 360
 atagcaggag tgtaataaac aattgc 386

<210> 664
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 664
 gccttaggtt ccagagcctt accaggatga gagggctgat ggtgacagtg gcagtgaccg 60

gaagctggga gcccttccca aagcccctgg aggggaactca ccactagcac gaaccgcca 120
ggccctgggt gccagcctag tgcccgcctt aggagactga catggaaggc ttctggcttc 180
agtcaaatgc catctcactc atttgcctct cctttcttcc tttccagaa ttaaagctca 240
taggatgat 249

<210> 665
<211> 278
<212> DNA
<213> Homo sapiens

<400> 665
cttatatact ttgatgaatc aagctgtcat ttanagagcc tcgtgggaag gactgagaga 60
ggtgtctagc caacagccac tgggcaactg aatcctacca acanccatgt aaatgggctg 120
ggaagcaaat ctttctcagg cttgagatga ccacagcccc ggtcggcacc ttgattatag 180
nctgtgaagt ccttgaaagc agaaccagcn taagtcagcc cagattccca acccacagaa 240
actctgaggt aataaatgtt taaagccact aaaaaacc 278

<210> 666
<211> 620
<212> DNA
<213> Homo sapiens

<400> 666
gactccactg aaatgcgctg actgcaagag tctatngagg gatgggnaat gtganccatg 60
aggacacna gncactctgg atggcgngct tgcccgngtn cntgaacnc ttannggang 120
gcnggntgtg gttcnanagg atgtgggctt tcccccttac aaanggatag aagtgggagt 180
ttgcctggnc ccccagacca gcanggactt ttacaagggg acctngaattg cttggganaa 240
actaatggcg aaaccttggg nctcactta agggctttt ttgnttgccc naaaccaaca 300
cttgatctnc cttatttggg agccaaggga gaanganccc cggggggccc tgaattttt 360
gcaanggtgg gcttaaacaa aaaacgtggg ncccaaaacc caacctgtg cccaaggcc 420
tgggaaatgg ccaaatgggg cttcgaatct ttggggtaa attaaaaaac cctnttgtt 480
tnttggggg tnaaaaaa aattttttt ntggcctta aaacccttt tggtttnaac 540
aaaantttt atttgggcc anttttaan cccccaaaa aaaaaacctn gggnntttt 600
ggggggaaaa aaacctttg 620

<210> 667
<211> 412
<212> DNA
<213> Homo sapiens

<400> 667
aagcagtgtc acgagcaaat cgcagaccag aagagacact tgtgggaaac atctagtac 60
tcagtattg cagagatagc aaggaggagg aatgatgggt caggcttctt ccagtccccc 120
atcagaatcc atgggacaag caaaggattc cataaaggca gctgagagcc actgggggct 180
tcctgttcaa aagctggaaa aagttaatca gaccagcca gaagacacta gtggccagca 240
aaaacctcat cctggggggag cggttaaaga cagggttctt aagcaggagc cccgtctgta 300
gtgtgagtc agcatcacca tgccaaaaa aaagtccacg agtgggcaa accccacaaa 360

aaccnngga cttggggtt tntggnant ttanccccc ggggaaggtt tt

412

<210> 668

<211> 257

<212> DNA

<213> Homo sapiens

<400> 668

cgtcgaactg agatcacaag accctgggtc cagagcggtc ctgctttaca cccgagggga 60
aaaggggaatg gtcctncag aaagggccan aagaatctgg agangaaggc cnatcacctt 120
tgccccgtg ggtgnccatt cttattgga cctaagcctt aaaaatagac caggtcccc 180
tgggtctttg ggtcttcatt ttgaagact cctgtcatgg taaaacctt ggattaaaat 240
aatggtatc atgcatt 257

<210> 669

<211> 497

<212> DNA

<213> Homo sapiens

<400> 669

ttcgtccact gagtnantnc gcancaagaa cagcaggcaa aaggaaaggc accaagtgt 60
aaggaagaat atttgaagca gaacagaaaa taatttctga gcaaaaaggg ctatgtgatg 120
atgcttcatt cagctgggtga tccattacac ctgttaagag gccaaagaga actgtatgac 180
tctgaggtcc atggggggcag gggcaaggga ataagatgaa gggaacacta gaataaatga 240
agtgccttaa cagctgaaaa ggctgatgga tgtgctttgc acctcagaag acggaactcc 300
cagcaggaga ataaagagtg caacaagagc agagcctgct agaaccaca cagnaggga 360
actgatcctc taataacctc tnccttcaga actttataat gngctattaa aaacccttg 420
tttngggnt anaaaacng ggctttaccc ccctaaang ggggtttttg gcctttggcc 480
naatcccca attgggg 497

<210> 670

<211> 257

<212> DNA

<213> Homo sapiens

<400> 670

gaactgagag acgagaccta tgttaccag gctgtatgtg aattcctgga ctcaagcaat 60
ctcccatct cagcctcgtc cctggaactc cctccaggt gcccaggac ctgagagaga 120
ggtggagtga agggggagag aaaacaaagc ccagggactc gccccaaaa aacacaatca 180
agaagatgct cccagctttt caatttcaga cactgagctc ctgcgaagat ttgttgga 240
ggaaagcttc tacagtt 257

<210> 671

<211> 254

<212> DNA

<213> Homo sapiens

<400> 671

agacnanncc tnnngctnnn nggtggcttc ggattccang agggcgccca anaacggatt 60
aactgncagc ttcttgagc acaagcttgn tattagcgcc tatatccttg gtcaagcaaa 120
agtggctctn caccaactta atggtctttt taccaccca ttttctggac gaacgtaatc 180
acaagtaaga accaagaagt gtgcaagtcc ccgaatcca agtgcttcat aaataaaaga 240
atcccagaag cttc 254

<210> 672

<211> 306

<212> DNA

<213> Homo sapiens

<400> 672

ctccacttc cagcctcct tgacctcag ttggagccat ttggctggag tatgaccaat 60
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ctttctggtg gcaccacaga ggcccgcacc attaccagaa gcataaccat gaagggaagc 180
accagaaagc ctgaatcggt tgcttgaag ggagaaactn ccagggggcc caaaataacc 240
cagaaaaatc ttaccttga ttttgcttaa aataagaaag taaatcttt tattggtgtt 300
aaatcc 306

<210> 673

<211> 125

<212> DNA

<213> Homo sapiens

<400> 673

gtagactgag atgatatga cagcaaagga aaattcctaa ccagtgcgca agaaagaaga 60
aatcaacca tgcataacac tgatttga taatatctta tccataaacc aacagagaaa 120
atgcc 125

<210> 674

<211> 288

<212> DNA

<213> Homo sapiens

<400> 674

agaactgaga caagagtaaa aaaatagtg tacacgagat ttggatatca aaaaggttct 60
gcagttaagc tgatcagtc cagcaagatg gaagatcaac ctcaccattc atgaaaagaa 120
aacaatggt ttaagtcacc accaccacca ccatgaagac aaagccaagg acagaaaagg 180
ggtgaccggc cttegtctag gagtttgta aaagagttaa aagtgtgtca tttgtttta 240
ttgcctattt tatttctccc cgactttaag aatgggtcct aagcttgc 288

<210> 675

<211> 343

<212> DNA

<213> Homo sapiens

<400> 675

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agtcnattg atgtgcagca aagcacacca nactccgtnc ttgntggna ttagnttgac 60
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aaccaggaat aaacaagtaa ggaaaaaact tcaatttga accctntaa tggacttccc 180
atttcccaa anttggccaa atcaagcact tncnennnt taccaaaggc ccccttnccc 240
cggacaagaa ttaatntta aaaaaacntc ttgatccca aatgtttcg ggngaggaca 300
aangtttga agtaacaaat aaaaaattnc caggtctcct tgc 343
```

<210> 676

<211> 94

<212> DNA

<213> Homo sapiens

<400> 676

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tagtctgca ttagtagact gagtgccatt aaagatccaa agtcatgact gactccaagt 60
atttcacaac ccaataaaaa agggaaaata ttg 94
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<210> 677

<211> 456

<212> DNA

<213> Homo sapiens

<400> 677

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gactctgggg agctcctgca ttaagtcaga gggngagatg aagaaactgg ggctctgaat 60
ggcatattaa cgcgtgcagc tccagacagc gaggaagtga tggcaactct atccgaactc 120
aaatctgcca gacctatacc agtaggtgcc tgtgtgcagt tggggactca cctctgcat 180
tgctggcatg agctagctgt cttgaactga aaacagacac taaagatgg gctgtgggat 240
cccagagagg tggcagaatg gtcaaagcta tgaagccaac agctgctgcc aagaagaaag 300
tctgagccc tgagtattg taattaaaa aacttaatgc tgggagtggg tgtttatit 360
ggaggagtgg gctgctatt ttggnittg ggaactgtc attcatctt tctcacggcg 420
cctactgctg ccttggncgg aagttaaagc tcaatg 456
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<210> 678

<211> 494

<212> DNA

<213> Homo sapiens

<400> 678

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agaactgagg aaaaacttga ccaaaggaag ccaccacac tgataattgc cagcctggga 60
gaaatgactg tagaaggcac atccaggccc cactcccaga cccagtgcc aggctccaag 120
catctctcca tactggaaca gcacggcagc tcaaactctg gaactcatal cccgatctgt 180
aaccgtacc tcagacctac atcttcaact gatttcagcc caactgtgag gctaattctg 240
ctttcttct ttgtagagag gcttaaaaaa aaatataaag aagatgatgg acacgaacgt 300
agattaatac tcttgaata ccttaagga gtaactactt taatagcttt aggtataaac 360
tactgaaac actgggatga attgggggtt atctgcttt taggtgaggg gaaaancccc 420
cnnccaaaat aaccncnct ggggttttaa ggttaanaat tttaaaant tntttnaaa 480
gggttggaag aggg 494
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<210> 679
<211> 246
<212> DNA
<213> Homo sapiens

<400> 679
gcgactgagg ttacaaggt gactacgtg ttctagtcca tctgaagaa tacaaaatga 60
atcaaagagc atcgcttctg ccctcaagga gcttcctatg tggaaaggaa gatgtggtac 120
ataaaggatg tggatttctg ccttggtgtc ctgctggtga attctctcca gttataaaac 180
atittgttac ctccatcgc tcttaattaa aaagggaataa gaaactccta gggctctgac 240
aacagg 246

<210> 680
<211> 447
<212> DNA
<213> Homo sapiens

<400> 680
gcctgataag tacaactggt gctgctggga gacgcttaca ctatagtctg aacttctaca 60
gagccttttc ctactgtaaa cctcactcaa aaatgacagc ctccatttc acaagaatca 120
gagtcttctg atgtgcccc cgtggtatca actcnggcc tcaagtatc ttctgctc 180
agcttaccaa agtgttgga ttacagatgt gagccacagt gccagctctg tgtgtgttt 240
tataattgga agcacatgac atcttttaca caatatgcaa atgcatattg aggaaggagg 300
gagagcaa atgtctaaaa gtaatcacia taagtctga cccattaact gtcagatcaa 360
aatccacacc aattttatg tcagaagaac actttgtctt ttttaaaac tnttntaaa 420
acacctccc ccgnttttt taaaaaa 447

<210> 681
<211> 299
<212> DNA
<213> Homo sapiens

<400> 681
agaactgagg acggtgggtg actggtccc ctggcccttc ctgctctca gcaagagctc 60
ctgccactgc cacagtggaa aaggcctgaa ttgggaaat gaagacgtca gagactcgca 120
acttctctg aaagcccagc caacttctc acaagcatga ctgcagacgt ggaagagaaa 180
aggcagatgg cctgggttca aagcccagct taaaaacaca tattctagct ttgtgacctt 240
ggtcattttg gtttacttc cctcatctgt aaaacgggga gaataaaggc ctctaact 299

<210> 682
<211> 500
<212> DNA
<213> Homo sapiens

<400> 682
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cntacagagc ggnccactag agctcagcca gatcatccta cagtgaagct ctgaggaaac 120

aagtaccatc tacaagggtgc ctaaggaagc acagaggaga gccacctcca aaatggatac 180
 cctctccaan ggttttagt gaaagaggca cagctcttgg cctggagtgt gtgggggctg 240
 cgataagtgc aagatacttg gtgacaggaa tcgcgagcat actcttgtgt tgtacggatt 300
 ctcagggtcg gccctgcaga ggaaagaact cngtcaccgc gaggtcctgc caacatgccc 360
 aaagtncccg gatatgtgtg cngggngtta aacctaaanc ccccccccc ttttaatttt 420
 ccnaaaaccc cccaaaaagg ntgggggccc ctctcttta ccccttaaa ngggggggggg 480
 angntgnttt tttgaataat 500

<210> 683

<211> 360

<212> DNA

<213> Homo sapiens

<400> 683

ggaggaggtg aacgcatgtt ttggcattac atctgggctt ccagccctca tcaaggggaa 60
 ggggctctg actcctgcc acaaaggac ttagttgctt tcaagtggga tttattcac 120
 ctggacagtc atgcaaccaa atcacaagca gagaggagc tcccccaacc cagagtcccc 180
 acacgtgacc cttaatatataa tgtgtattga tgacaacctg aagcagcctt gacttcagtc 240
 ctcagganaa caatatgcaa ctctttataa caactggagt tcccagatt tccaaagtgc 300
 aatgaagtg aaagacaatt tctggtgagc atagacatta aaaatgagaa aacaaatttc 360

<210> 684

<211> 469

<212> DNA

<213> Homo sapiens

<400> 684

ggatgaggtg ggaagagcgg tggattctac tcctctttca tcatttgacc ttcaacaagt 60
 caacctccac tctctgggcc aactcagcaa accaagccc aggacccgac cacctccaag 120
 atccactca gtcacaagat gtcacagtc tatttctca agagccttc tccagcatgg 180
 actgattctc caggcccctt tgtgtgtata ctcccacaa agggacactc acaaattgca 240
 ctccaacaag aatgagatta tcctctaaag tactgcgtta aagtgaggat caggagagaa 300
 tgaataact ctgagagaca ctctctcta tacagaagca agcaagaaac tgggaaaggg 360
 aaagtcctc cgaacagaag gggctggaga aaactcataa cacattagcc ttactctta 420
 aagctttcag ncaccaaaga aatgcttgat tccgaaatcg gttttgtt 469

<210> 685

<211> 310

<212> DNA

<213> Homo sapiens

<400> 685

taactgatgg tngtntnt nctaccagtt tacttaangc tgtatgtacg ctgcttgaac 60
 cctaaaagct gggaaatgag ccaaggccac ggtgtcagc tgaggagcag gtgtccctga 120
 gaacccaaac atcctagagt gtatctggga acataccaag gaaaagagtc tcatcacatg 180
 cggcagccaa agagccacaa aatcagctta aaagcagctt anaggcgtgt ggtgggtgga 240
 tctctagagt tctctgatg ctgcccgaag atgtcctgtt tgtgaatcct aataaactca 300

tctactcctc

310

<210> 686

<211> 97

<212> DNA

<213> Homo sapiens

<400> 686

caccagaact gcagatggat ttccgacgga tgaatcacct tcagcaaccc cagcaagttc 60
tcattaaatg ttaccctaa agtaagattt tatgatc 97

<210> 687

<211> 344

<212> DNA

<213> Homo sapiens

<400> 687

agcaatctcc catctttaac agatgaagct taacacaaga gcagcacaaa aaccgtgaaa 60
aagaaggtgg taaaaaatcc atcttctcag actaccttgc tgatgaaaaa aatagctctg 120
tgacacagtt caagccgatg aggtatgagc agaanagttc tctgactgtc tggaaagnct 180
gatttctga tacagacacc actcttttcc ccatgcctga attctanatg tgttgataga 240
tactggggca gccatccagg gaccatgagg ggnagaccaa gagaattcca gaaaggntga 300
ctttgttga actcaacct ctgaaccact tgctactct taac 344

<210> 688

<211> 193

<212> DNA

<213> Homo sapiens

<400> 688

tcgattcaaa tgttcttcac agttgtcaca cccacaggat cacaaactca actgaatctc 60
ctttaggta agtttctgtg gaagaaactc agaaaatggg acctggagaa atactcttct 120
catctaaatt gtcaaaacac ctatggatcat ttctcagtaa ctgataatcc aaaagtaaaa 180
tattaaagtc cag 193

<210> 689

<211> 306

<212> DNA

<213> Homo sapiens

<400> 689

acagtctctc atagtcctnc tnagcctaata aatcctgggtg accaactata cccagcaggg 60
aggacaagc tcttaacacg aaagagttag gagaatctct ccattaccct ttacatatt 120
cagggaagag agaatatcgc agtcgctgga aacgaagggc acagcatcgt gttgctgtat 180
ggccacggtt ggccacagaa aggcagaaag tcatcaactg tatggaaacc agacaactct 240
gacgatttct atgcaagggtg actacacctt actcgttctc caagtattaa agatcttttc 300
atcctt 306

<210> 690
<211> 489
<212> DNA
<213> Homo sapiens

<400> 690

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attacagatg ttctgaaga caggctgaga aacagaatca ttcaatcac tcctgctgta 60
tcctgagggg agactctccg cctgttcaac acagggacac gctgcctccc gtggcaaggt 120
gactgtcttg ctgctgactc gggcaaaaag accatgagaa tgaattcacc aaccagggtt 180
ccctcccncc gtaaatactg tgagaaaatg gatgtcagtc tccagctgac cgcagagaaa 240
tcacggccag gtgttggcac ttacagagaa gaatgaatac agaactgctt taatcataca 300
ctcaggaaac tcccaattg tatcaatgac tctatataag gaaacgaggn ttgggacctc 360
caacnaact cnttgggngg cccaagcaa aacaattcac cccaacggng gccctatgga 420
caaganaaac tcctgcagtt attctatatt ctnagctccc tgctcctcgt tttcctcacc 480
ttagcaaga 489
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<210> 691
<211> 244
<212> DNA
<213> Homo sapiens

<400> 691

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ccctcttcca actggaggct tatcctgtgg ctgggaacat ttctgcctg gctgcgagga 60
gtgagactaa gaaaccatac ctcaggctga ggagagaggc cgggtttgat atgtgtgccc 120
tggggaagaa aaggagaaaa tgtgatactc tctcatttaa agcatccaca tcaaaaattg 180
aagaactgga ttacattgct gtttacttag tcaagttaca ataaacttga tttccttttg 240
ggtc 244
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<210> 692
<211> 237
<212> DNA
<213> Homo sapiens

<400> 692

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agaactgagt taagaaaata cctgggagga ggagccaaga tggccgaata ggaacagctc 60
cggctctacag ctcccagcag atgggtatca ctatcttgcc cagcctggcc ttaactctg 120
gaattcaagt gattctctg tctcagcctc ccaagtagtt gggactgcag gttgcacaag 180
tacacctggc tctgatttat tattgaagac tccaaataaa gaacttgcag aaactct 237
```

<210> 693
<211> 147
<212> DNA
<213> Homo sapiens

<400> 693

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gtatccctga ccattcagga aagagacatc aatgaccgga aacaatacaa ggaacacaag 60
attctcatga atcaaatgat acttggaatg aatacaccaa taagaattta ttgccaaaaa 120
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gttactttat taaaacaaat tttaa

147

<210> 694
<211> 169
<212> DNA
<213> Homo sapiens

<400> 694

cgacagagtt gaaaccagat gggatcac acaattaca acccagagt tttctgtta 60
cttaaggac aaaggaagag gacattgaa aagacagtag ttnagaagc ccttgaaaat 120
acctccatca agaagctctg gatctgcaag ggggtggggc tttgcatt 169

<210> 695
<211> 429
<212> DNA
<213> Homo sapiens

<400> 695

cgataatag ctgtatgagc ctctgtct gctgcccatt acctgcgtca cctccacaag 60
ctactgaacc tcaaggaacc catctcctca tcaggaaaaa aaataagctt tatcagggtc 120
tgaactctgt aggtcttcac cacggctcag gaggatgagg agcagtgaca ggccaaacta 180
cgagaaaaga cagaggggaat caaactcaac actgtgtcta aacctctcc accactgttg 240
aggggatcct ggcatcagat ggggaacagc tctaatcaa aataacctca ctactgtgct 300
tttctgtaaa accaggtaaa gatcaacaa gcatgagttg aaaggntaaa aaaaaaaaaa 360
aagggccggg gnggccattt angtgggat tnaacnngt naaantntt aaaaaggggg 420
ggcccccc 429

<210> 696
<211> 185
<212> DNA
<213> Homo sapiens

<400> 696

gctgaaacat gactatgatg gtgacctagc ttggccatg caggagatga cagtggcaag 60
agaaggaaaa tctgggttc agatcgacat catggagcag agctgcgcca acaacctgaa 120
atgcatgctc acagtggcct gtaagaggg acagaaatat aaacattaat gaatgaaacc 180
actat 185

<210> 697
<211> 292
<212> DNA
<213> Homo sapiens

<400> 697

tgtagaagaa gaacagacaa agattaaaag actgcagggt tgaaggaagc tcatggaaaa 60
atgtgcagag atgcataaag gaaggagaaa agtgcagcaa agccacatag aaaaatggcc 120
agaagggtca ctcttagcca ccaccacaca gagaaatgaa ctaaaatgaa aactcacaac 180

tcaggaatat ggaataataa gcaatcagaa acataaatat aagcagtttt atctattcat 240
tatttttatt ctactattag aataaattca tgactaaata aaattattca gc 292

<210> 698
<211> 472
<212> DNA
<213> Homo sapiens

<400> 698

gtcctgcatt ggccaactga ggattcttcc aaacaagagg ccctagtctg tgactgtcaa 60
gccttgccat caacactcct ctttggtgga gagctccctg ttggccctga ggcaggagtc 120
ttctgagatc ttgacatag ctgggcttga tccaggcctc agtacagggtg aggaaacgga 180
ggcctgtaga agtgaagtga cttgctaagg ggcagggctg aggtctgagg cctggtctga 240
gtccaaaacc cgggcagggt ctgagagctc caccctgctg ccattctacg tccaggcagg 300
gcctgcaagg gacagcaatg atgcaaagac aaacaagga agagcaacc cagccctgcc 360
acaaaaccag ctgggaccnc cggccaaaag gagttattcg acctntccag cctcagttnt 420
tcactgtnt atgaaccaa cangagtaaa tatagaatgg gagtgaaac gc 472

<210> 699
<211> 203
<212> DNA
<213> Homo sapiens

<400> 699

agaactgaga tctgaacttt aatactcttc atgcttacag accccggctg gcctctgtcc 60
ctcaccattc tgtgtctaga aaaagcagtt gagaacccat attcttcaag aacccttccc 120
cattacaaa caccatatta ttatatttaa tctacccttc agttcttttg tagccaaatt 180
aaaatgtatt actctgaaga aag 203

<210> 700
<211> 372
<212> DNA
<213> Homo sapiens

<400> 700

atgcgggaga gaatatTTga ccttagattt gtccgcctgc atctttctcc tgacgccaac 60
ctcagttcct cctctgactg cctctctcca tctgtattgc aaaacaccaa actctctgcc 120
aaagaacaca tccagggtgtg gccatgtgac tgagctctac tcagtgaagaa ctgtgtgtgc 180
acgttctgga cgatgcctca gtgaggcgat ggcacatctt tgccttccct ttgtctctg 240
ggaagtgatt ttgaggatag aaggatgcg ctgaggatga tgggacagaa tcatgaagcc 300
tccatccaag acttcgctcc ttctatgga ttcttttat gngggaaaat aaataattgg 360
gggggggtgga aa 372

<210> 701
<211> 396
<212> DNA
<213> Homo sapiens

<400> 701

gactctggcg agctcctgca ttacctcnca tctgtgactc tgaggggaga aagggaatga 60
catccaggac aagaacaaag aatagaagag gaaaggtgct gctacaagtt ggaaagaagc 120
agacagaggt cctgtctgat tctccaaata tgtgtctaata ctgtttactg agttccatag 180
cacttgagc catccatgcn aaaatctgta gaagagcatt ccaggaagag ggaagagcaa 240
atgcaaagac gggcgtgaga gcttggtgca tacagccatg ggccaaataa agtttccttg 300
gaatagcaaa aaaaaaaaaa aanggcgggg ggggnnnngnc catttnggtt tnancnnnc 360
cnnnnntttt ttnagggggg gggggccccc ccccc 396

<210> 702

<211> 495

<212> DNA

<213> Homo sapiens

<400> 702

gtggtgtcc cactgntgaa gagcangcga cnggnaagga ccatnaanca actnaccagc 60
taggagtgat gtactatgat gggctgggga ccactctaga cgctgagaaa ggggtggact 120
atatgaagaa aattcttgat tctccatgct ccaaagcaag acacttaaaa ttgcagctg 180
cttacaacct cggaagagct tattatgaag gaaaaggngt taaacnatca aatgaggaag 240
ctgaagact gtggcttacc gcagcanaca atggaaatcc caaagctagt gtgaaggctc 300
aaagtatgct cgggctgtat tactcaacca aggagcccaa aggggtaaaa aaaggcnttt 360
tactgggcnt tccgaagcat gtggcaatgg aaatctggag tcccaggggtg cacttgggct 420
catgtacttg tatggacaag gcatccggca ngatacggaa gctgccctgc agtgcttaag 480
agaagcagca gaacg 495

<210> 703

<211> 369

<212> DNA

<213> Homo sapiens

<400> 703

aactgaggaa ccttgggtg cccagctgct gtccattctc tacacttacc ccacctgatg 60
gaaggctgtt aagaaaaaca tcaactgcaat gcctaataaa cagacatggg tcccagaccc 120
aataagagtg aaacctccc cctatttaaa tgaaattatg gctgatgaga aagacaaatt 180
aatttctctg tccctagtat tacacaaaac ttggatgct gccattgtta caattttatt 240
tccccagga gctcagagtc ccaccttcat tcttttgtt taatgcttaa gcttgccgtg 300
ccacctatgg aagactagaa tgagcaaaga ccatgtattc aatgatctgt aaatctaaca 360
ggaacaat 369

<210> 704

<211> 153

<212> DNA

<213> Homo sapiens

<400> 704

gtgtgatgga tggagcattg gagcaaccac aagggaat aatacagaca tgaagaaaac 60
agtaaagatg ctgtccctga catcattgag cagtcagcaa ctgccacta ccaaacttat 120

tgtcatgtga aaaataaaaa cctccaattc ttt

153

<210> 705

<211> 131

<212> DNA

<213> Homo sapiens

<400> 705

atccaggagg taancaatca actaagagcc aggcaccttt ttaagtcag taagaagaaa 60
catttttaca acctgctgtc tctgaagtct gctatctgag attcctctcc acaataaaac 120
ttggtctcca c 131

<210> 706

<211> 323

<212> DNA

<213> Homo sapiens

<400> 706

atcatccaca aactacaagt aacatgtagt tacaacatgg ggctcagaat gtaccaagat 60
catctatgt ctacagaaaag gagtaaaaca caaagactaa acagagttac ctattcttg 120
ttagcctgag aaaaattctt ttcagatgtc tttcattacc tcagaaatgg aggcaaagtc 180
ttaaagaagg gtcatataat actttgaaag gctattgcca tgggtgtggtt attaagctct 240
tgggaaatga tgggcttctc ttaagtata aggaacaatt gtgcccccta agagtcattct 300
tgaattggaa tgaaataaac tgg 323

<210> 707

<211> 273

<212> DNA

<213> Homo sapiens

<400> 707

gacctgcatt aaggtcgact gagtttaaga ttccccagat gccttggata atttgtttg 60
gaaaacatat attgaagata ccnagagcca cagtatgaca gaagactagg tcccagaatc 120
acaactggaa ggaaagtcat gactaatga agaaaacaat tcttaaggct tatatgagct 180
gaaaacaaac ttctgtcatg ttgctgcctt tatccatttt taaaagatgt ttgtcatcag 240
tgggtctact ctaataaaat acatcatgag cac 273

<210> 708

<211> 390

<212> DNA

<213> Homo sapiens

<400> 708

gcctgacaaa ataagtggct gtgctcggaa agcccaagtg acaatgaagt ccaggttaacc 60
tctaggaatt gcaggttccc tcttgagct gaggacagtc tccagtctcc agccagcaag 120
aagccagggc cctcggctct actgctgcaa ggaaaggaat ttgcctgtg cccggagtca 180
gagtggaaagc cagttcttct ccagtgaatg tgaacgcagc ctggccagct ccttgatggc 240

aggcgtgaga ccctaagtgg gggactgagt gtacctggac acctgatcca taaaaactgt 300
gagaaaaatc tgtcttgntt taaagnncn tcnttgggg gcaatttgca gcattaaata 360
attaagtaca agtacatgtc acccaaggtc 390

<210> 709
<211> 430
<212> DNA
<213> Homo sapiens

<400> 709

aagtctcaac aattaaaga aaattagaag ccaagtgcag tggctcacac ctgtaattcc 60
agaactttgg gaggccaagg tctgcatac cactgaaact actgatgtca gctttctgaa 120
ggacccact gagaagactc actaaagaaa gcagtttcca tgtctgatg atttgtctc 180
ccttaccctg accaatcaat ggccctaatt ttgggtcatt ccattttctt gccctccatg 240
atacccttaa agaccctgcc cagacctcgt tggggaaatg gatttgaggg tctccccca 300
cctctttgct gggaagctta tgatcattaa actatttctc tgntgcnnnn nnnnnnnnnn 360
nnnnnnaaaa ggggcggggg ggccantnn gttnnnntn aancgggngn nttttttaa 420
aagggggggg 430

<210> 710
<211> 473
<212> DNA
<213> Homo sapiens

<400> 710

gccataaggt tcttaagagc agagaatatt gtttctgtaa tgattctcg caaaagcact 60
cagttacagg attcatacca catgatagat tctaaatctt gggaacagaa tcaagaatcc 120
agaaatggat ggaaccacac gtatatgaac aactgattt caacaaagat aaaaaggaaa 180
agctcaccta tgaaagagt cttctctcca gccagacaat aggagtaggg aagagaccga 240
tgctgaatga ctacgaaaa tactgcagga aatgcagga cgtccccag aagtccttc 300
cactggcttt tgccgggctg nttcattaaa anctggcagn aaggatgaat cnaagaaaa 360
aggettattg taacctcaca tcataaatt tataaaactg cttcataaaa aataaccttg 420
gggtccagga actccactag aaaaatgtnc aacctgtctt caaattgggg aac 473

<210> 711
<211> 464
<212> DNA
<213> Homo sapiens

<400> 711

ttcctggaat agcacctgat acacaaaagg catccagcca atgtttgctg aacaaagaaa 60
tgaaggctgc ctgcatttac taggagaagg atgacaacca catgggacaa aaaaagaagt 120
tttttggtg nancnagnc cgggggggtc gnantngggg ggtntnggc ntannnnnt 180
taaaaaatga ancccgggac intcgcgna ctgcntgng cagggnaaaa aacagtentt 240
ccggancnc ccancnggg gttggaacg tgctccgta cattccaact agatggggtt 300
tctctctgt gtccaggctg gagngcaatg attgaaaat tggnnncctt taactctga 360
gctcaagcaa tctcctgcc tcagcctcct gagtattntg anagtatagg tgtgtgccac 420

cacatccggc tccacttttt gttttggaag attccctca acat

464

<210> 712

<211> 316

<212> DNA

<213> Homo sapiens

<400> 712

atgagcataa atgagagtta atgcatctaa aactgaacac aaacacctgg gggaggaact 60
gtgaaggacc ctaacaccac caccaccctc accacccttg ttgtcccgca tatccacagc 120
caccatgggt gccttggcca gcagaagccc aaaactgagg gcccttgtga aaccagctgt 180
tggaatatat aataaaggag aagttcattg gatgctaact caaacaggac caatgaaata 240
gcaacatgtt ttactatcg ggtacgtgtc ttggtagact cacggtaaat gttaataaaa 300
tatttgatga aagaat 316

<210> 713

<211> 513

<212> DNA

<213> Homo sapiens

<400> 713

agactctggg gagctcctgc attaatcat gaactgagaa atgaagactg gagaagcaat 60
gggacacaca ggcaatgggg ctaggcattg gttgtccca ttcatcatg cagcaaatgg 120
ccattgcgtc cccttctgt gctaaacctg tgcaggtgct gccggacttc ctggacataa 180
gacctgtcc gggcactcac caccatcatg cttgaggccc tgccttgggt tcagtcttcc 240
cacgatctg actggcagtg tgtcgggaca gtccccaggc aggcctcccg gatacctgtc 300
tagattatct ctgtggtgga ttagccttt gccccagcat tcaccagtga caagaaaaaa 360
aagnactttt antnttcca aggctntacc tgggtggtgg nggatgctgc tgcactaga 420
aggctactgt aaataaagcc tgcttaatct ccttaaccgg gatggcttgt gtcaaccggg 480
ttggagccgc caggaaacag cccatgctt aaa 513

<210> 714

<211> 323

<212> DNA

<213> Homo sapiens

<400> 714

agacgtctgg ggagcacctg cattaatgtc gaanctgagc atcctnca actngatct 60
gtgatttggg cacggcttgg tggaggcagc tcatttctgc ttacgtggc atcagctgag 120
gtggcttggc cagaggttgc agaactcgcg tccaggacag ctcactcatg tggctggcaa 180
gttgatgcgg tctgtcagct gggagctcag cagggtattt ggctgggggt cttggttctc 240
ctccacatgg gctttccac gggttgcttg tgcttctca tggcatggtg gctaagtccc 300
aacagtaaac gtcccaaaag aac 323

<210> 715

<211> 320

<212> DNA

<213> Homo sapiens

<400> 715

```
gaagtcaact gccatttttc gtgagctgtn aagctgacct atggaagagg gtcccacatg    60
ggcagggaac tggatgtctt ttgcnacag ccnagaaang gatggatcct tttactacc    120
ccaagaaatg gagttgggag cagaatcttc cccaagctga gcctttcaga tgagaccaca    180
gaccatgcct ggcaccttgg attggcagcc ttctgagaa gacccttaa gccagaagac    240
atccaactac acccattgcc tcaagttgct tgaccccaca agatacccat gaagataata    300
aatgttgtct taagctactg                                     320
```

<210> 716

<211> 251

<212> DNA

<213> Homo sapiens

<400> 716

```
gtcactttc aaaaccgggg gnggtcagcc catttggcct ctggatgaag caggatgcag    60
gctgaatgga gaggtgggtgg agttcgagct ctgtcccagg cactccctca ccagctatc    120
tgccaataca ccactttgat ttatctattg taaagctttt taaaagtgtc ccttaaagta    180
gcttaaggac aaatgtgaat aaagcttcac agcaagtggg gatgcagcct gaagaggcac    240
gtcataagct c                                             251
```

<210> 717

<211> 93

<212> DNA

<213> Homo sapiens

<400> 717

```
atctcccata aattcccaac atcaactatt taaccgtatc atctcatggt taaaaaaaga    60
aaaaagaaga agatgatgat gaaagaaaag aag                                     93
```

<210> 718

<211> 470

<212> DNA

<213> Homo sapiens

<400> 718

```
tagtgtcata agaacggact cggttcttcc tgcgtgacca cggatgcttc tgttgagaa    60
nangcatccc acggtgggac gtttanatca agaaagctnn tgannaagac atttgtnaaa    120
gggcaacctt ggggtantgg gggaaattat ttctttttna tcaaccctt ctgcaataca    180
agctggaacc tggcnccata ggaagtctcg ggacaattac gggaccatcc ttttctttt    240
tctcttctt cttttttt ttggtnggat tggtttggga nacaaaagtc tttgtttnc     300
ccaaggtctg gagtgcagnt ggcgcaaadc cccgggntta ctgnaaacct nccgccttcc    360
ttggtttaa ggggaatttt tcttgctta aancctnct gaagataact tgggaanttt     420
nanagggng gngggaaaan ccaaaaaaac cnnggnnaaa atttttttg             470
```

<210> 719

<211> 417
<212> DNA
<213> Homo sapiens

<400> 719

```
gggagtaaac aacaccctcc cagaagatga tacaggccaa atcccgcaac gagagggtg 60
ggtcggaaca cacacaggcg cacctnccan aggccccga cacttcattt aaggnaagaa 120
cggagcatcc cacgaacggg aacaagnttg ggaacctggg atttggttc ggtgacacc 180
taagcaaccg ggggtgaagaa cgcttaagct ggggaatccc gctggccttc tgnatcaaa 240
agcctgtctt ttaccggcc aacctncca acccctaagc aacccccgc tcccaggaa 300
aaataaagtg ccaccacgt cgttcaata gcaccggccc aaaaaactcc cacttagtt 360
cctggaaaaa ttaagtcccc ggcanggggg cctttttt ttttaaagg gttttc 417
```

<210> 720
<211> 161
<212> DNA
<213> Homo sapiens

<400> 720

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gtcttggac ttagtctaga actatactac tggtctcct ggggtctcca gcttgcctac 60
tgcagataac gggacttctc anactccatt agtgcattg acaattcctt aaaataaatc 120
tgnatgnatg ttattgnatc aataaaatat atatgtatcc t 161
```

<210> 721
<211> 485
<212> DNA
<213> Homo sapiens

<400> 721

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gaggcaggtc tagaggcctg ggagacatgc tggacaattc cgaaaccaat tctggttaca 60
gaaggcgaca tgtctttcat gtgggccatt caatgagaat gtggggggacc cctggcagag 120
atcaggaggc ccaaagagg agatgacaga gcagagccca agagaagcat ccagaggaaa 180
cgttcggat gactcctccc ttctccggcc agccactct gaaggagggt agcgcagggg 240
cacagggtga gggctgacct gcctgtgagc cccggccctg ctactactg gctaccgtta 300
cctggacaga tcaccacttc gctgagcctg agtctcatt tggaaaacag gggaaaaaat 360
actattttt taanaanaca tggntnggc attaaatna attnttgcca nattctntan 420
ctntgtgaaa gtcagcntat ggaaggcnct ggagagnnta acaataaaaa aataccttgg 480
ccttt 485
```

<210> 722
<211> 290
<212> DNA
<213> Homo sapiens

<400> 722

```
ngatgcctcc aagttgttgg aaggaaagta tcngancatn tacnagggaa aagggccaca 60
ttgttgggca ttncaggcca caanccctna agcttgaggg tcaagaagct nacaagccag 120
```

catttaacca ctaacccac caaggtggaa aggggaagac ttcgaaagc cttcaaaact 180
 tgcccaagc ttaatggcc aaggtgggga agcagaagat gaagttgtcc ctgtcttgaa 240
 aatttgaag actcatgaag ccaaaaataa aatgtaagt tgtttaagg 290

<210> 723
 <211> 629
 <212> DNA
 <213> Homo sapiens

<400> 723

tttctgcnct cctccaccc tcgngctct gccgnctnca cccctnctt nattaaagcc 60
 ctgnctggn tggnncaagg ncaggtgggc acccttnac cccgagaaag aatnttnaa 120
 tgggcaagg ggnattttt nccaccccc ctngaccna ggaaacccn aaaatgggcc 180
 ccaaaaacca gcaaccnagc cttacaggg agactttca agaggaggag gaatttggc 240
 ccaaaaataa aaccacttgg tggggaggta tttgggatc cccgaagaca aaagaaaacc 300
 ctttgcaaa agatccctca cttgcaag gacaccattt cgctaaagc catcgggagg 360
 gggcaagtc cagggcccg gaaaaagca aatttggac ctttctctt gggccggaaa 420
 caccaaaaag ccaaaagttc cnggggaaa aaagnaangt ttaaggngn taaaagagg 480
 cattttnt tnggacttn ccacggangg ggaaaaatac tttccaaag ccaaattnc 540
 cggggcccg gcaccaagga attttttt gntanggggt cttcaaggg gaagcctnt 600
 ggggccaga aanccaaaa aggttggc 629

<210> 724
 <211> 149
 <212> DNA
 <213> Homo sapiens

<400> 724

agaactgagg ttgtactgt cagtggacca tngtggaccg ctgggatntt gggcaggggt 60
 gccttgggat gangggcggg tgggacctt tatatnatgg ggaaagcact ctcacttatt 120
 aaagatctt gnaaatattt aaaaattg 149

<210> 725
 <211> 113
 <212> DNA
 <213> Homo sapiens

<400> 725

tgttctacc tggctcaagg aacctgctt ctctaaagg ggagcgtgc acccgatt 60
 tggctttta cggtggcct cagctcact tcagaataat ctttctaaa cac 113

<210> 726
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 726

cccagaccgg tgggaacccc cntagtctg cttattingg cntgaggaga ggtaggctnn 60
 cgancctnnc nnnaaaaaat gggtttttc tnacattggg aaantctgac nccttctnag 120
 aaaataaagt ggcttgtgtt gnccaaaccc cttaaccca agggaaaaag tccncgaagg 180
 ancctctttg ngnactccta aagccttatt ggaccagggt accttntctc nccccaaggg 240
 agaanccttg tcttgtcca ataagtggaa gacaagggtg gaagaaattt tttggcgcc 300
 ctacnntttt tttccattt tcaaaaaag aaggctgggc catttgntta ccttctgt 360
 ggatcg 366

<210> 727

<211> 167

<212> DNA

<213> Homo sapiens

<400> 727

gagagtagg cttngaggc ttgtaactt tgaagaatg agacgaagt cctcccaaa 60
 attactact cccactctg gaagatctc acaaagccac cagtctcaag aactatattc 120
 atcaccttt ggatgggtt tttttttaa ataaaaact aaaaacc 167

<210> 728

<211> 213

<212> DNA

<213> Homo sapiens

<400> 728

gattcttaa gcgcaaaaag cccaatcat ttcttgaga acaaggacgc agatcttaca 60
 tcacgaacac tnnnactnn ttcatgggtg cagtaagaag atggaatcat gaaccaggaa 120
 gtgggtcttc aacagaccca cctctgccca caccttgatc ttggacttcc taagctcca 180
 ttaacncnga gaaataagcg tgtttttaa acc 213

<210> 729

<211> 451

<212> DNA

<213> Homo sapiens

<400> 729

aactgagaca tctgacnnc aagcttggcc cttattaca gagctngaag gencaccgga 60
 aaaggagtcc agtaaaaggn nngagcagct tcagggccca tggctacccc catgcaaagg 120
 aggtgaggcc acagaaccga actggggtct gtgcgcttg cacagcaaaa gtcaaact 180
 aacattagga tggcagcgag aggaagtga gcaattatt gcaagcacca agcaaacaga 240
 gtggacagt tgatgcctaa gateccacct gcccggtggc tgcagaatt tcaggatagt 300
 ccagggatca ccgaagaga tcaccaaact ttcttatga agaaccat actaccaacc 360
 ttccgtnttt gccggcncg nggctttga acttaactgg ntaactttc attaacngga 420
 aagtagcnc ggnccatat ccaaaaaaa t 451

<210> 730

<211> 542

<212> DNA

<213> Homo sapiens

<400> 730

ggacctgtgc ccnattctg aggtttttg gtgntcagng gngnggggcta tcgcctttaa 60
aataacctgg gcctgggcag caacatggng nantgaaaa aaagcaggct ttggaatgga 120
taaaactata ctggaatctc tgctctatca ccttatcatg ttatggcaag ccagntacgg 180
aacctccatc atttgnacgt gcctaactca gcttctcgcc tgctggncan gctctggaaa 240
gctgagtga aacagaaaag agccagaaa ngctgtgggg acaactgca ataagtgtca 300
catgggcctn ctctctttt tatgtgcccc atgtccance ttttccttg gtggccnctt 360
tccanaaaac ttttgaaac cattgggccca aagttacctg gaaatttcc ctgggcctt 420
tnaacctttt gaccatttg gtaaaaggta ngaanatgga tnaaaagcct ttaagggnc 480
caaagggcag gngggggcct caanccctt gggcttgggg gtaaatgggg aaatcaattt 540
tg 542

<210> 731

<211> 267

<212> DNA

<213> Homo sapiens

<400> 731

tnacttcag aaaagagtga ccatttgga ttgtccaacc attaagatgt gaagactgtt 60
ttggagtcc tggtagctc aatgttgctt ccctgtcctc ttgcttcaa tgcttgagc 120
cacaacagcc atatgcaaac atgagtgaac ggccaaaaat taatcataga gacatctgtc 180
ctgataccac cagccagtg aatcaatacc agcaacactg caactctgct tattatgaag 240
gaaaaataaa gctctgtttt ataaagc 267

<210> 732

<211> 755

<212> DNA

<213> Homo sapiens

<400> 732

gggaaaaaac ctgggaagg gccctttccg gcccgggggg ttttgggaa ggggggnaac 60
caaaaaaac ctttctttt tttttnggc cngggggggg ccctttttt ttttccaa 120
ggntnggggg ggggggggaa aattncggc naaccccng gggntaaant tcnncgaaa 180
aattaaaaaa nancccttt ttttttgg aaattgnaa aaagaccccc cgggncccc 240
aacccccca aantggngg ggggnaaata ccnggggggc ccccaantt tttgggna 300
aacccaaaa agggnaaatt ggggggaaaa ttttngggc gaacccggcc caaaaggggg 360
ttntcttt tncagggg ccaccggcc ttttggngg ggttggggg anagnaaagg 420
gggcctta tttcccg gccttanttg gaaacttgg gggnaacaaa ccaaanaaca 480
aaatncggc nttgcttct tgatggcncc gncctgttt cgggcttgt canncgcaag 540
ggccgcccc gctcttttn ttaaaannga cctgtccgt gctgaatga actgcaggac 600
gaggcagc ggtatnntgn tngccacag cgtctgccac tgtctgacg tgtactgaca 660
ggaaggctg gctnttttg tnaaagcggg caggtctgc atntaacttg tttcggnnaa 720
gatcatatg tgangaanac ggggttgat acctt 755

<210> 733

<211> 367
<212> DNA
<213> Homo sapiens

<400> 733

```
gggagtaaac accctccaaa gatgatcanc caaatccgca gcgagaggnt ggggtcggaa   60
cacacacagg cgcacctccc agaggccccc gacactncat naaggnaaga tcgnagcatc   120
ccacgacggg aacaagnttg ggaacttggc atttgcctcg ctgcacctag cagccgggtg   180
aagacgctta nctggggatc cgtgtctctg tcatcaagcc tgctttcacc gccacctcca   240
accctagca accccgctc ccaggaaaaa taaagtgcc cccacgtcg tnaatagcac   300
cgccccaaaa ctccacttta ntctgaaaa attaagcacc gaaggagcct tttctttt   360
gaagggt                                     367
```

<210> 734
<211> 484
<212> DNA
<213> Homo sapiens

<400> 734

```
ctcccgatgg acccgagatt cagggatctt tcccgggtaa acggtggggg cnggcngaaa   60
gaaatgcnat agagctaatt taagntctag atcatgatag cctgggatat gggatatgaac   120
tgntattggt cgggatttcc tggaccatca tatggnaatg acagnttgnt atgtaatgga   180
gatgactgcc cagacctatg taaaaattta agtttctact aaaaatattc ttctgaagc   240
ttatgagact atttcaagg aaataacttc ctaaagaaat agggcccttg tgaaacacca   300
gggaataaag gaaataaatt gagaaaaatc cncaggctt atttttattg ntnccttnc   360
ccgggggttn aaaggaattt ttaattaaaa nggttcacan aaaagccctt ttcatttatt   420
ttaaagatt ggacatattt tgncccttta cttatagcta gagcacncat actgggaaag   480
gtta                                     484
```

<210> 735
<211> 192
<212> DNA
<213> Homo sapiens

<400> 735

```
cgacctgcat taagtagcac tgagagctga gatccaccct gcattcagtc tgaagtgaca   60
gaagcaagag actctgtctn caagaaaaaa gaaagaaaag gggtatttaa gtcctagtc   120
tctggccctt tcttccatct catatttgg gnggcttctg tcacataata aatatgnatt   180
cattttctcc tg                                     192
```

<210> 736
<211> 271
<212> DNA
<213> Homo sapiens

<400> 736

```
atcccagaag ccttgaaaac aaagagccca caattgcagt aaaaagcagc agcccggcag   60
```

ccaccagaga gggcagagtc cgcacaccc caccacttt gaaggagctg gagctcctc 120
aaagcctcat tcaaaagaaa ttgtcattat ttacctatc tgggtgttcc cgggaaccct 180
acttgcaagg ctggctttat gtgattaaag ttcacagtg taaaaaaccc tttccctag 240
tatgtttgtc aaaaacaatt aaaggttaatt g 271

<210> 737
<211> 210
<212> DNA
<213> Homo sapiens

<400> 737

gactgaggtg ccgtgtnttg gagtagtggt tctgtacct gtcaccttta acaacaatt 60
attgagcacc tactgggtgc cagatactcc accaggctct gagaggacag aaatgcataa 120
gacacaattc ctgtctctaa ggaggccttt caaaaagaag agagtagaaa aaattcacac 180
attccccca ttccaaatg acatctgaag 210

<210> 738
<211> 389
<212> DNA
<213> Homo sapiens

<400> 738

agcctgcatt aagcaactg aggagttcgc gccctctgtt ggtgttgtaa tcaccgccta 60
tgtggagatc ctacatctct gggctctgtc agtgtttgtc accagcctct gacgtgcatt 120
tataatcatc tgctggacat ttctacctgg gaaattgaa ttcttggtat ttgcataat 180
gtgttccaag tagagctaatt tgaagtctt tccaaagaga atgtctatca tcttttttt 240
gtttactcaa aaagtccac catacaataa gctcttcaag aaagatttgt acttatgacc 300
ctgaatgggt tagtgtgttt atgctttgtt tagaggcatt gaattttgtg cattcaaat 360
acctgaaata ataccatcct ggaccggtt 389

<210> 739
<211> 214
<212> DNA
<213> Homo sapiens

<400> 739

agaactgaga ggatggaata aaaaccgcaa ctcaaacctt tcaagaggc caccagtcatt 60
tagacactgg catccgttag aactgctgca agcttaaatc aaacagtcac ctggaaggaa 120
caggctctctg gagactcccc tctagctctg agatctgtat ttcacagtta ttgaggcac 180
tgttaaaagc agagaataaa atagttgaaa attc 214

<210> 740
<211> 216
<212> DNA
<213> Homo sapiens

<400> 740

aagagaaact tcacagcgt gtgtcccgga gtgaggacgt ttggagcagg agcactcact 60
 gccacctgtg atgggcatga agctagcatc catgaccaga gttttgtgct gttgcacat 120
 tacaaaatga gcacaggagg gtggacggga gctctctgna cccttcactt aattttgctg 180
 nggaacctaa aactgtttta aaaataaagt caattg 216

<210> 741
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 741

caagagaaac caaggngaa gagaccaaga aagaaatgag aaagagatga aagggtgaag 60
 ngacagaacc ttctgagctc tcctttcctg ctaaatecca ggcacatgct ccagattcct 120
 taggcaaagg aagaaatgaa aggagagaaa gagaccataa ttttaaaactc tattaataag 180
 gactgcctga tatttatacc caaaagaacc aatgatgcca tgggatctaa ctaagatatt 240
 aacagatatg aaaagagatt caacagagta gaggagcttc agatatatac ctgtcgtggg 300
 ttggctcign gcttccccca aatctcatgt caaaatggaa tccccacccc ttgaaggang 360
 ggcctggggg gagngattg aatacgggan cnaactgncc ttgctttnt agcgatggag 420
 ttctnagaaa nctggttgnt tgaaagngcg nggacttccc ctttctggct ttt 473

<210> 742
 <211> 764
 <212> DNA
 <213> Homo sapiens

<400> 742

ctcgcggttg aggacaaact ttctcgggc nttcangtg gggggaatcg aacgggaatc 60
 cgaataaaag cttttggaat ggaagcccg ccacccattg gggaatccgg gccatttgg 120
 aaccaaagaa tgggaatttg gcaacgcaa gggttcttc ccgggcccgc ttgggggggt 180
 tggggaagaa gggcttatt ccgggcttat tgaacttg ggccaccaac caaagaacaa 240
 aatccgggct tggttcttg gaatcccg ccggtgtcc cgggctggtc aagccgcaa 300
 gggggggccc cccgggttct ttttggta aaagaacccg aacccttgg cccgggttgc 360
 cccttgaaa tggaaacttg caagggacga aggccaagcc gccgggctta ttcgtnggg 420
 ctggcccaa cgaacggggc cggttccct tgcgccaagc nttgtgcnt cggaacggtt 480
 tgtcactga aanccgggg aaanggggaa ctggccttg cnttttggg gccaaaaan 540
 gggccnnggg ggcaaaggna atctnccct ggncaattt taaaccctt tgggttccc 600
 ttggcccgga ngaaaaagg naattccaa ttccaattgg ggnrtgaaag gccaaaatgg 660
 gcnggggggg ggnrtgggaa ttaccnccct ttggaattcc cnggggtta accctggggc 720
 ccattttc naaccaacc caaagccgn aaaaaaat ttgg 764

<210> 743
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 743

agaactgagc attttccaga ntattcaang cttcangatg ggcctgggat ctactnacc 60

gtttgcccat acttgnCGct ctattggccc acaagactcc aaaagacagt gatgataaag 120
 gaagactagg agtgaaatct aatctctgta acattcctag atatcaggaa ggtcagaaag 180
 cagaagtctt aggagcctgg acatttgcca ccaatgcctc tatgtagcaa tcctccttga 240
 taaatgcccc taaacagaaa tcaggagata atgggttcac ggaaatgaga gactagactg 300
 cattttgctt ccagcccaag cctaacaaag gcaggggaaa aagggttcat ttaaagaga 360
 aacagagtcc tggaatcaaa aagctcttta ataacataac actaaattta agtcagaagt 420
 gggttaattt acttttgc atgatttga ctcatagaca tatctagtag aaggttgaat 480
 aatttgaggt tatacctggg atgagtaaaa gggttaagg atcagatcaa aaaaacaaaa 540
 gttcaaatta aaaagagaag gttgtgactg c 571

<210> 744
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 744

aaccttgaga aacatgcctg ggactaccgt gcctnggagg gaggggcccag acaccatggg 60
 gagccataac ccgaggtccc ccaccccggt cattnccanc aanaaaaccg ggtccttga 120
 ccaanccacc acccagccaa gcttnccaag ggcacatgaa ggggaagtcc cgcccaaaga 180
 tcaagcaagc ccgggcaaaag cttgaccac aagcccaact tgcaagacgc catgaagcaa 240
 agcctttaa gcaagcttga aaatccacca aagatcaaac ttggaaagtc tccaagttct 300
 tggggtgcca agtatttctt tgtttgatg cccaanaag tattgggggg ctcttttgtt 360
 aatttgatt aaataaata aatcattggg gtaaat 396

<210> 745
 <211> 211
 <212> DNA
 <213> Homo sapiens

<400> 745

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 tagaagaact ggctttgca acatcttctt gattcgatt cacggcagat gttgttctg 120
 gaacctgtg tgaagcattt tagnatgag ttgtaacatg cacagcctgg ctagtaatga 180
 gtttataaa ctgctgctta tgtgtctgt t 211

<210> 746
 <211> 527
 <212> DNA
 <213> Homo sapiens

<400> 746

ggctacctgc acgagtnGac ttgagggatg ctctcatgg atgcngtagg gncctttcct 60
 caacctatc cactnaatt aatggcncgc tgatcacaag tgtnatgaat agaaagccna 120
 ggnaacatct taactttgca tgaattttat ttggctaac gaaggctctg cagaatcatg 180
 aagcaaatga gaaagatgat agagctcctt ggcgngnaag cagatatatt gagaagatga 240
 gaataaagac aaccgttgaa aacagtccag gaaaataaaa agcctggaca aataggatag 300
 ttgtgctg ccttattact ctgccattgc ttcatagata tcagttcttc atggcttctt 360

catgcctcta atcaacagac ttacttggg acatacaaaa ccaagaatct agtccagtaa 420
 atttgagggg ctcttggta cctcaccaca actaccttct gtaattaat gngcaaatct 480
 ttgaagaaat tatttgaaac ctgtataaag gtatgattgg gaaaaat 527

<210> 747
 <211> 198
 <212> DNA
 <213> Homo sapiens

<400> 747

gagaggcaca acaacgattc tatgccaggg gaaagccgct gggcctgctc cgccctccaa 60
 ttaaccatt ttatctgaga ggctggaaag gaagaaggta caaggccagg ggctcagcta 120
 tgaaaacatg ttctgaatgg gataaaaaca gcagtgggaa gcctctgtct tatataata 180
 aatagtagat gttaaagt 198

<210> 748
 <211> 909
 <212> DNA
 <213> Homo sapiens

<400> 748

gtagaactna acntngcggg tgaggacaaa actcttcgcg ggncttttcc aagtgggggg 60
 aatcgaacgg gtattcnnaa taaagcttct gatggaancc ccccccatg nggaatcggg 120
 gcatttgaaa caaagaaagg gaattgncac cgccaanggt ttcttcgcg gcccgctttg 180
 ggggtgggaag aagggttat ttgggtatt tgacttgggg caccaaacaa gaacaaaatc 240
 ggcttgcttc ttgaatgccc gcccgtgtt tcccggtt gcaaccgnc aaagggggcg 300
 cccggtttct ttttttca aagaaaacga acctgtccc ggggtgccct tgaaatgaaa 360
 ctgcaaggg acgaagggca agccgccggg ctatcgttgg ggttgccac agacggggcc 420
 gtttcctgc gcaactgtgc tcgaaccgtt gtcactgaa gccggggaag gggactgggc 480
 ttgctattgg gggccgaaaa tggccggggc aangatctnc tgcaatctc accttgcct 540
 ctgcccgaga aaagnacca tcatgggctt gatggcaaat agcggcgggc ttgcaatacg 600
 ctggatccc ggcttacctt ggccattcg aaccaccna agccgaaaac aatnggnatt 660
 ngaagccgga ccaccgttac ctccgggaat ggnaaccccg gctttgtcc aaattcagga 720
 atgattctg ggaacnaaaa aaaacaaatt aangggggct ttgcgcaag cccnnaaat 780
 tggntngnc canggttta aangggggcc gccaatgnc ccnnaangg gcgaaggga 840
 ttttcgtcg tggaaccca ttingggaan ngncngnc ntttttcca anaattaaat 900
 gggggggga 909

<210> 749
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 749

aggactgggt ggaggctatg tccgcctccc ctggaagccc tcaaggaccc acagaagtct 60
 cgagcctgcc agtgtgcagc gggggacaca gatccgccct ctgcacggg agcatcatgt 120
 gaagtctaag aaagccctgc aggaccagcc gtctcacact tgcgtggaa aatcccatca 180

gcacacctct gactcccacg tgggaatcac caatcatca ccatcaaacc gccctcccc 240
 aggcacaaac ggcaaacgca gccctcccat gcaaggga ggtctcatcg ctctgccata 300
 gtcttcacaa atctccaaat acaaccaaga tgtgtctccc cc 342

<210> 750
 <211> 216
 <212> DNA
 <213> Homo sapiens

<400> 750
 gaactgagag acaggatctt gctttgtcac ccanggtgga gtgcggcagc acaatcatag 60
 ctactgnaa cncngaact ctaggcttaa gtatcctt tgacttaacc tccagaacag 120
 gnttttaagt catgtgcaaa gaacttactt ctccatactg gaagtagaag ttctcaaaa 180
 atttaaaagc aaataaactt atacgtaatt tacttc 216

<210> 751
 <211> 875
 <212> DNA
 <213> Homo sapiens

<400> 751
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 ttcgaataag cttttgatga aaccgcgccc ccatnnggga atcggncca ttgaacaaa 120
 naatgggaat ttggcacccc aggtttctnc cggcccgtt tgggggtggg aagaaggcta 180
 ttcggtatt gacttggggg cacaacaag acaaatcggg ctgtcttg atccccgcc 240
 gtgttcggg ctgtcaacc gcaangggg cgcggggg ttcttttg tcaagacc 300
 gacctgtcc cggtgccctt gaatgaaact tgcaaggac gaaggcaagc cgccgggcta 360
 ttctggggt tggcacnga cggggcggt cctttgccg caagcttg ctccgacgt 420
 tgtcactga aagccgggga aaggggactt gggcttgcta ttggggccg aaaagtgcc 480
 ggggggcaag gatctcttg tcatctacc ttgtcctt gccgaagaa aagtaatnc 540
 atcatgggt tgaatgcaa ttgcggcggt gcttcataa ccccttgaa tncgggcta 600
 nccttgccc attcgaacca ccaagccga aaacaattg cattngagc cgaagcaccg 660
 ttactnttg atgggaagcc cggctnttg tccaancaag gaatgaatc tgggacaaa 720
 aancaatna agggggctt tgcggccaa cccnaaatt gttcgncca nggctcaaa 780
 ggggccgcca ttgccccaa cggngaaag gaaatntcg tcntggaanc ccaattggg 840
 gaaagncnc nnncttnc caaaaattaa atggg 875

<210> 752
 <211> 746
 <212> DNA
 <213> Homo sapiens

<400> 752
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 gttcaaaccc cnaaaagcc aagggngggg gaatnaccan tntnaccna agctgggtg 120
 ggcattttcc caaattctt gggaaagaac cccnaagaac caaaaattc cgnggagaac 180
 cttnattgaa cccanance ntnggaaat aaccggggcc ttgcggggg ccttgaagc 240

ttgggaagaa gtttgatggg caaaggtctt caagtcaaag ggcacttcaa gcttcaaaaa 300
 taccaccacc acctggttg ccattattaa gaagcttggg aaattaaggc aaaatatggg 360
 accagggaagaa tcttgaaatt tcttggttt gggaaattg atgaagggtc aaaaagtcaa 420
 accaaaaattt ctgaaagac gcttgcagg aagggtgaaga aaagaaaagg tatcaagcac 480
 acttgatcaa gccagcctaa ctgaaagat gatgtattgg aaaggggaag ttgggagttt 540
 gtttgaaaac ccaagggngt ccatgatccc tcccacttg gaccttttt taaanaaaaa 600
 ttctgnggc cccgccattg gtatttaaaa atcctcgcca tcaagtctt tcttgcaaa 660
 aaaaaaaggg ccnnngggg ggccnatng ggggttgggg ggtaaccag gngtgggnnt 720
 tnttttaaaa aagggggggg gggggg 746

<210> 753
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 753

gctacctgca agaagtcaga acttgagctc aagaaggaaa atcaactggg tggaccccgg 60
 ggccttnccc cacactnnn ccnaaagaaa attggcccc nccccttgg gaaagcgcca 120
 aaccnatggg ggccttcat tctttattg ccaccaagac attagggnnt caacttccc 180
 gcttggcctt nacenttaag aatcattaag aatgccctaa naatgggagg ggcgaatgga 240
 ccattaaaag ctagtcttc ctttctctg gtgggnctg gngggaaagt gaccttttg 300
 aaagtaaacc cagcaaagta agcattcatc ccaacaaaa gtgggggatt 349

<210> 754
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 754

atctttcagc ctgtgtgtc atctgcaa atgaaccaag aaacaggcat tctctttaga 60
 agaaaaatgt ataggaagcc tgctcagagg aagngagggtg ctccagatga cctctggaag 120
 tccctgccag gcttatgttt tgaattttt gtaacattt attatgtaaa acagacncat 180
 tagctatgtt tactcaggca catggaagaa gattgagaca attacctaaa aattcactgt 240
 gacttttcag taaatgttat taaagaaaaa gtggg 275

<210> 755
 <211> 768
 <212> DNA
 <213> Homo sapiens

<400> 755

atggagtctc gctctgttg cccagggtg ggaagtccag tgggcacgaa tctttgggct 60
 tcggttgnaa cctttcaact tccgggggt tcaaaggcga attttcttg gctttaagcc 120
 ctcccgaagt ggggccgggg aactacagaa agaacaaggc ttgaaatggg ttccaagtc 180
 tttcaagtc ctggctcctt gggccaaaca acttgggacc tcttcaaaaa gtctaagcca 240
 aactccttct tccaagccgc ctttgataaa acaaaccccc tcatgcttg gaaaccacaa 300
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cttggggctt tctttccaa gggccttaag ctgccaac ccattttaca cccattgccg 420
aaagcccaag tcaagtcacc ttgaaagaaa aagggaagac tcacaagaaa gggcccaaag 480
atgaaaaaga ctctttaaat ccttggggggg cttttgaag ttttggtt ttaagcaagg 540
gaaagacctt attttaaaa aacaaaattg gttacacaag aaaattttgc caagtttacc 600
aggaacaaga tggaatnaa aggacattta tnggncnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn nnnnnngnaa ngggggggggg gggggggggg nttttttt tgngggttt 720
taaaaanggg ggggtttntt tttttnaaa aaggggggggg ggggggggg 768

<210> 756

<211> 612

<212> DNA

<213> Homo sapiens

<400> 756

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gtggatgcc tccacttaag ttctgcccgc atgtgctgta agcagaagta acgtgtagca 120
cttccaggaa atctctttat aagacagttg tcagatgccca gttttttcc cttccactg 180
cattattact gccaggttca tagccattct gaggatttca gaaggctgat ctctggagaa 240
ctgagggggt cgaagattg acttctcagg agcagggctg agaatggaat gggcccttaa 300
tacctgacag ttcccaagc cctgatgaca caaagccagt gtaattaatt cagaacataa 360
ggcttctgat tccattactg actcatcatc agtaagtggc agcagcagca gaaagtcact 420
taagcttctt gtgatcatgg caccgtgatg ggcactttgc atgctcctgn ctgctgacaa 480
tggcacatat ctgcagtgc gtgggccgct ttggaaagt agtagcntgg ggtagggnc 540
tttaaaaaat gggggtggga tgcagnttig caaangctgn gggtagaagn acccctgggt 600
gaaacaactt tc 612

<210> 757

<211> 139

<212> DNA

<213> Homo sapiens

<400> 757

ccgaagcaca ctgagatgcg cngnctggac nagnctatcg tggatggaaa tgggagttgg 60
tggaanagag tcactctgnt gctgctggcc gtacaagatc gctttccca aggaaataaa 120
ttacatttca ttctctatt 139

<210> 758

<211> 388

<212> DNA

<213> Homo sapiens

<400> 758

acactgaggc agtgggagag ctggaggagc ctgntacaaa cctcagccca ttgcatcnc 60
ccagctctgt cttnganaa gatgactgan aggaaggtgg tnttgagaaa acaaagcatn 120
canccttgt gaagcnganc ctaaggtcc cctctccagn cntggntgac cccanaccct 180
cntttcttc tctggcntcc aactnaagg attggcctgt ttcccttaa ctatagctac 240
cactcagctn actcgtgtaa naaggcanag cccacgcctc ctggcacaag ntcccttnn 300

gctacctaag gcaagcgaat gagtctttt catngtaatg aactgtattt cccttctttt 360
ggaaaaccng gggggtaaac aaataata 388

<210> 759
<211> 178
<212> DNA
<213> Homo sapiens

<400> 759
ttgcacaagt tgggtattnc ncaggtggac ccnttnaaa agatggnttt taaaaggaat 60
ggaccaanaa ttatttggga ttggaaaaga atggggcccn aaccaaaggn ggnttacctt 120
ggnttaccct ttcttaaaat aaaaggttt tcattcacct taggtttca cccattgg 178

<210> 760
<211> 586
<212> DNA
<213> Homo sapiens

<400> 760
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agggtttat tcccccccc ccaaggaatc ttattgctt tcttaangg gccccgggct 120
tcactttccc ngggaggaac ttgaagaatg ggcttggaaa aaatggaaag aaacaggggg 180
aaaacttigg gacccagaa gacattactt caggagggaa aagaacgct tgtgttgaa 240
agggcgggag ggccaagaag ggtcaagggg gggattcatc tattgaagcc accaagactt 300
gccacaagac ttccaagcc aacctcacc agaagccag ggaagaagag gcaccaaggg 360
gcaagaagtc tacctcatic ccctcaagaa agggaggtca aaccgggtgc ttgatactt 420
ggatttctg acctttacct ttcaagaaac ttgtggaaga caaataanat ttctattgtg 480
taaggccaaa aaaaaaagg gggcccgggg gggggccant tcagnttggg ggacttaacc 540
agggttgaaa cttgtttaa aanggggggg gggggggggc ccccc 586

<210> 761
<211> 572
<212> DNA
<213> Homo sapiens

<400> 761
tgagtcctg cagnagtaga actgaactn tcatttcca gantcaagc tncaccatc 60
atgcagnaag ggcttance cncctacga tgctacngc aacaggatct ncaggccacn 120
gctenggcc aggtactcac atcagtgtt ctatcaacac tcaggacaga cccatagaag 180
aggcccaagc aggccttga agtgcatgtg gaggccacca ggcaaggaat tctggagtcc 240
cagatcatat ctgggtgtcc atcagcatgt tacttcatc ctctgtacct cagtttattc 300
atctttcaa tggaagcaac atatagagct gccttataga gttgctctgg gtattagatg 360
tataatatat gtgaactgct tggtagtgg cctgttatat ggnatgtgct caataaatga 420
nagntggta ttattgncat ttattatcat catcatcatc atcataatta aatattattc 480
caagccacaa tgtggttctn atagncaaca attattaat aaatgnaacc tttccaaac 540
ttccgatctg nnaaatttna aaaaatattt tc 572

<210> 762
 <211> 544
 <212> DNA
 <213> Homo sapiens

<400> 762

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ttcttttca cactcactca tgaaaagtct ccgattttcc caccttgctc agccacctta   120
agtgccttcc ttcaagatat ttctactgc ttctaaagag gatctcccat tggcttgga   180
gcagcgtgag aagagacttg tacacagaga ggctgggcaa ctgtacatg gttgcacaga   240
tgtccagagg cagtgtctgag atgtgaacac aggaagactg gattcagcat ctgtgtact   300
aaccaggaca ctatgaagtc tctcatacct gtggtactag gaaaatcaga gaaaattca   360
aggagggtgg ggcattagaa gctgactatg gaggaacccg nangagattg atttttggn   420
aaannaaagg gccnggcctt tgcnggtaaa aaaangggag tgttttctgg atgccaacac   480
atttggggcg ggcctaanat cangaataga tgggctggat cttcagnatg gacttaaggt   540
tctg                                     544
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<210> 763
 <211> 658
 <212> DNA
 <213> Homo sapiens

<400> 763

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ggctacctgc atnngngac tgagatggga gaaaaatgag ttcaatcagt agactcccat   60
gacccttca aggtgacca tcattctttt tccagaaagt ggcagcttnc ttatttggg   120
ataagcgacg acagacgaga aaccacaaag aatctgcaga cgcgagactc cctgacctgc   180
agatatacag ccatctccaa taagtctaca tttaactaa aacttctcct gttgagcaag   240
cataatgtgg aattatgta gcaagacctt atgcactccc acaaatttc tccaataaa   300
aaaaactgtt atcaaaggat tgtcaccccc ccagacatac agcactgcag ggaaaaagga   360
gcccagacag ccgttgggag ttgacctctg gccgcacgcc tggggtcagt ggagatctat   420
gttgacttta tctgtgtgcc cttaaggag gcctcttctg taaaataact aangngcnc   480
taaattacac ttacttgnaa tgctggatta atggattctt ntacaaangn tgaaanacct   540
gggcttttgg cttcatgan cctaanttta actaccatga agcttctgaa tctctacca   600
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<210> 764
 <211> 658
 <212> DNA
 <213> Homo sapiens

<400> 764

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tttgatggaa agagcaacca ggaatgagt ctacagctgc aaggaagtga attctgcaa   120
caaccaccag agcatggaag agaaccctga ggcttatatg aaactgcagc cctgtcaaa   180
actgattaca gacttagaag accctgagaa gagaactaag ttctttctgc attctgacc   240
cacaaaactc caaggcccga tagctctggg aaagcagaac ttggccttt ccaaaaatt   300
tctgcccttg gttttgggga tcatttgggc aagcccaggg tgctgtgcat gggggctcct   360
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ggaatcctga gaagggcaga aagccttggc cccagactca tcgtgcagca gctctgagca 420
gtatttcggc tgaggagtga ctcaagtga atattcagct gaggagtct tggccacgtg 480
tcacaacct actnttggg ggcctggggg naaaaggcgg cntaaaaagg ttccaagggc 540
ccaacttga aatggngctn attgcttggg tcacaccagg cggtaattha nccttctttt 600
gagctggtta ncgctgnt ctgaggctgg gngagaaaaa taccacaagg gcccaag 658

<210> 765

<211> 507

<212> DNA

<213> Homo sapiens

<400> 765

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gtggggaaaa aaaaaagggt ctctatttaa naggtagccg ngagcacaca ttaacctat 120
accggaaca acatgaagct ctgggagtca naatgccttc ggctgatatt atttatggaa 180
gccaccana tgtttntc aatccanaa gccagggtg ctgaaatac tttcacata 240
anaatgcacc tacatcagga gcacagccaa aacctcagt aaacatgcct ttactgatt 300
gctttctgcg ggggttaaact cccgcaaagg acaaaccag gacagtgagc ggggtgtnt 360
gntgtttnt aaaaaaacg ggggctccc ggattnggt tctntcctt ggaagngcn 420
cccctgcct nttttaaaa agnggttaa tgatgttaa gactgcctt tgactnggg 480
tgaaccagg tgccatgcc attctc 507

<210> 766

<211> 186

<212> DNA

<213> Homo sapiens

<400> 766

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catgaaacta agcattctgg ctccagagtc caggtttta actcaacgga atactcagca 120
atggtgagt ctacgccctg tcgtccctc ctgggtctca cagaatggaa ataatgtct 180
caactc 186

<210> 767

<211> 225

<212> DNA

<213> Homo sapiens

<400> 767

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ctatcttatg tagtactaa tttatgaaca gcttgggtat ctgaagttha agccagctgt 120
ttaaaccaga acgaaatgt ctatggatt aacatataag tgtaattaa ttaaattacc 180
agactacata cacacaaaa aaaannngg cngggggggc caatt 225

<210> 768

<211> 290

<212> DNA

<213> Homo sapiens

<400> 768

gcaacaacgg tcacatcctt tcccttctgt gtctcagcca cagtgtgggt gtgaacaaga 60
aaccaagca gcatcctcat cctatctgca gctacgatga ggactccaac acttcctcaa 120
ccacatgacc actcggattc aggtgctaaa gaagcacttg tttaaaatag ctaaattgtg 180
gtcctgaat tagctatgcc aactatttc agttacaagt cttcacaata tttattaaa 240
gtattaagtc aatgattaac actgagaata aaaaaatatt tgcccttct 290

<210> 769

<211> 524

<212> DNA

<213> Homo sapiens

<400> 769

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ctcgtgagaa ctcattccaca tcacaagaac agcatgaaga aacggaacaa ggggaatgca 120
atctcacagg atggaaataa cctgtgggtga attgttgcca tccagatcca cttttaagtc 180
cacatggttc attcattttg gactagatcc tggtagagcc cagtgaactg atattcttga 240
aatcaggcac agaggctctg aagtaatgca ttacatttgc atccatgatt tgcttaaaat 300
gttccattta gcccttctc ccaggaaaca aagccagcag tatttgatta ttgaatagct 360
cgttttgat gcttaanttt ggaaaaaatt ttttaaaat ttngggaaac ttggnntttt 420
acaaaatgaa tcatgagttt ttttcaagt ttganttgg ctccaagggt tgaataaact 480
tanaagtcta ggatcattat atattagctc tattttacat gctc 524

<210> 770

<211> 173

<212> DNA

<213> Homo sapiens

<400> 770

ggccagacct ctgcagaagt ggtgtcaatc acttnactcn ttenttagc ctactgncc 60
ccccnnttan nanccnaaa aactttncca aaggaaatca aactacagaa cagcaacaaa 120
ctcaaaaaat taacatttgg cttttgtgtt attaaaatat ttctcagca gac 173

<210> 771

<211> 548

<212> DNA

<213> Homo sapiens

<400> 771

gtccttcat ccccaaacag gaactgctgc aaggcccgca gcagccatgg gtgagtggct 60
ctggagatgg ggtaagtggc ctacgcaccc cagaggaaca gctggcagcc tagtctcgg 120
gcagcagctc cactcagccc tggggaatga cagatacaga caaccagtta tgccagtga 180
gtgccctaaa ctgagatag ctggggcgct gtcagccacc ttaacagtga gaagaagcaa 240
caggatgaag tggaaacagc gtcacacaga tggagcctcg aatcccagca tgctagccat 300
gtgtcatctt catagtcttc ctaacgtctg tggcctcaga tgccacatca gtaaatggca 360

caccatatgt gatttaggct aagggcctga gtgtaataag ttgctaaga attatagccc 420
 ttcttaaata aatggagaaa cagtcctatgt tnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
 nnnnnngggg gggggggggg ccttttntt tgggntaaa ccgggtntt ttttaaaaa 540
 gggggggg 548

<210> 772
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 772

cagcgccctgg cagtctgcat catttcgcca cagtgtgaaa ccattggctg atgtataaag 60
 tggaagcccc aggaacctct caaggcccag ctcagcctc acctccctg tggctctct 120
 caagcagacc cataccaagc tctctgtgct ttggaaactg ccagtgaggt gaagtgggga 180
 ggcacggag cgacagccac gttgtatgcc tgctgcacga gccagaccgc aggacaatac 240
 tcaatgagag gcaccaaat ccctcctggc tgagctgatg atggtgagag gccacagagc 300
 catgaaatg acttgagca gcctccatgt attcctcagg gttgaatcat tgtgtgcacc 360
 acanancaat tttntttt taaaaaaaag ntaaacactt gngaaaaaaa gggggtaggg 420
 ccnttcctt gtttgacca aggaacaaat gcaaaccaga cctgcttct ntcaccangc 480
 anaagctgc tcttcaatt cagagatc ttcaaggacc caattatgct cg 532

<210> 773
 <211> 8
 <212> DNA
 <213> Homo sapiens

<400> 773

gcaagaag 8

<210> 774
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 774

ccccctgcnc atgaagaagc ccattctgtg taggagagag tgatgccnac ncaccagaga 60
 aaagaaacga gagagaaagc agagagacag agacagagag agcgagcatt ctgaaggcca 120
 gtcctcttc cctgtgctt ccaggtcct gtgcttgcca ataaactgcc cttttcttc 180

<210> 775
 <211> 121
 <212> DNA
 <213> Homo sapiens

<400> 775

aatatgtga atcctaatta ccaactcga agtattagga gatgggacct ttgagaagt 60
 attaggtat aaggatggag ccctcatgga ccgattaat ggaaagagaa gaaaagaaa 120

<210> 776
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 776

```

ggctgggcca cacctctgct ccaactgaca cagcctatcc caggcccatg gtgcaccct 60
ccagcatgca ggagaaggga atgcctctg actgaccaag gaagccacct gcaatctct 120
tccagacctc ccgctttct ggtccctggg ctccctgtga cctgtttccc aagtctctcc 180
ctccagggct taagagggaa gaagaagtga cataggacag tctctccac ggcagcctga 240
aaggacctt gtgcagaggc cagcatccag agcaggacaa cctcagttag gcttctctcc 300
aactccccct ttaccacaaa agccctnag caagctnggn cntttaaata aacanaance 360
ccaantgga aggggccctt gaagtcatta tggaacatcc tcagatcaan aatgaggca 420
aaggatttg gggaaataaa agtcaagag gggcggaag ta 462

```

<210> 777
 <211> 341
 <212> DNA
 <213> Homo sapiens

<400> 777

```

catctgcatt aagcgcantg aggctacatg tacacagttg tgcagctgaa gagaccaacc 60
agagctggaa tccagcctac attccagtca ccacgcatgt atccggacat aaaggaggta 120
cttttecta atcattaaga ctcaatatga gctagtggga gatatgactg aagtcatgac 180
ccaatctaaa ttaacatcat tatataatca actgcattaa ctaaaaatgg caagtataca 240
gcctcaaatc aataaaggat gtatgcaaaa aaaaaaagg nnnnggggnc nntnagntn 300
ggnnntancc aggnngaact tgttnaaaag gggggggggg g 341

```

<210> 778
 <211> 523
 <212> DNA
 <213> Homo sapiens

<400> 778

```

gaactgagga aagagaagcc agctctataa ttacacaaag tctccccacc ttactcatct 60
cgagtagtga ccaccgtgaa tgggtccacc gccagcctct tgggaggcag ccgggggaaag 120
cactccatcc tgggacttag gagcatgaac tctggagaaa cacagacctg tgttcaaacc 180
cgagtccact gcgtctcac aatgtgatct tggacacaga tccaatgtgc acagcaaggc 240
attcaaatag cacaaaggct agatcctcca aagggaattc gccttcagct ctgactccca 300
gttccccagt ttactgtct ggagccacca ttagaagct tatgtatata aagaattgct 360
gacacagaga cacgaagtga gcatttgctn gttggggaaa aaaggggcn taatntntt 420
naccaggaat tgccacaanc cttnaatttt gtaaaacaag gcccaacaaa acaaggtatg 480
cggaagcagt ccaggcagta caatcagcca aaactgatta tga 523

```

<210> 779

<211> 507
 <212> DNA
 <213> Homo sapiens

<400> 779

```

agaactgagc acctctgctg attgtggtgg ctacccaag gcatatccag atcctcattc   60
ccaaggaatc tcagtccttg gtccctgct gctgcattta accactatc atcaataaca   120
aacaagggag tatgaagaat gaattccttg cgtgacaaac atttttctcc ctgcccattg   180
tgcaacagaa gtgacacttc ctccagatat tcagggttaa ttacctctgc tagaattgtg   240
acttgaatta ctgttttaag ccaactcatt cttaataca gtcagactt ttgcctcatt   300
cattcgctga ttgtacaga ggtgtaagtt cagaggttgc catctagcct tctcactac   360
aatagcttta atccacaggc cnaggaaccn cgtgngaaaa aatnggctgg gttcccaaag   420
ngggnttttt ccaactatca ttcaggcnct ggaaaaaagg acttctgact gagtctggga   480
acccgatggc ncattgcaat ttaaaag                                     507

```

<210> 780
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 780

```

cagccggaat gatgctctga agacctgtt ggacagtga ctcttactc aaacctgcag   60
cagatggaat gatgctctga agacctgtt ggacagtga ctcttactc aaacctgcag   120
cagctggaac gatgctctga agacctgtt ggacatgca ctcttactc aaacctgcag   180
ggctcccgca tctctctg agcagaagcc cacctgccag ctcatccga ctgtgctgt   240
gcctctctt cccactggc tcagccatcc atcaggcctt gtgcatgca ctggccagct   300
cccttccag ggaacacttt tccctgcat ctacttgcc aacttctga tctctttaa   360
ctcattcacc ttctcaangg gacagantaa cgctttggg actnaagncc aacantctng   420
accatctcc aangtttcta tcctngttg gtcctacag gacataccct atttgctt   478

```

<210> 781
 <211> 491
 <212> DNA
 <213> Homo sapiens

<400> 781

```

gaggatgcag cactggcccc acagcgcca catcctggct ctggaaacac tcggtctcct   60
gattcagtga ggctacacgg aagcatgagg ccagctttg ggacaactat gacatctgca   120
aggctgcaaa gaggttttag ggcgagctcc aggtggtct ctgcggccaa ctgactgtgc   180
gtcacggctc aggagtcct gcagtagcca cagccgtgct cctgtaaaac gttgtgggt   240
cctatgttta cattctctga ctctgaaacc atcgatgtca ccaaacacac tctgttggc   300
ctgtgttta cacaatcaa ttcagacaca tgaanatgat nangtgtggg gtgccaagct   360
gaaagtgcta ctttcagttt ggtaaaagna aaatnntaaa agnactaact ttaacatccc   420
aaaaaattat tnttatacca aaaacatttt tagagattga agaacagtat aaaacctttt   480
cctgttctact g                                     491

```

<210> 782

<211> 193
 <212> DNA
 <213> Homo sapiens

<400> 782

```
cctcaggtgg tcgctggagg atgaagatgt gtctgaggct gactgagatg agctaattggc 60
ctgtgcccc ccagatacaa gaatgagctc cagccaagac cagaagaaca tccccctgc 120
ccaagcgag ccaaggtcaa cagaactgac cacatgaccc atggactcgt gagaaataaa 180
ttatggttgc tgt                                     193
```

<210> 783
 <211> 537
 <212> DNA
 <213> Homo sapiens

<400> 783

```
acgcctgact gaggctgtac aagatgngng gtgccagcat ctgcttctgg ggacagcctc 60
aggaatcttt caatcatgga agaagtgtc cccctggaaa tcagagaact gtgtgtatag 120
aagatggaag atgagagaga tatggaagtg ttattatgat ggaagtagaa atgtctgaga 180
aagtgaagat ctgagggtc aaaagttgcc tggagactct agactggaga agaaatggaa 240
gtatagagag gttgaccagc tcaatcact ctctcaggaa gcttcagagc tgagatccaa 300
gtccagggt acttggttc aaggccagag cacttggtct agagtgcct agattagagc 360
taggtattta tgggaaatgn ggnattctnt aaaatggta ccaggganaa ancttttggg 420
gggaaaaaaa ttgacctcc ctnatcctct ccacaatctc ttaacatct catatctggc 480
atggccacac agttcaaggc attcaaacga ttgccttcat gggtttctg ctgatgg 537
```

<210> 784
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 784

```
ctgttatcct cctatttga aaacggaggc acctgggacc cagctccagc aaggagagt 60
aggatccgac tccaggaggc acctcaggac caaaggcctc aaggccaaca cttccacgg 120
cacaagcccc acaggggtgc aggaccgta caagcagcg accatccctt tcttcttg 180
actatgttt cccctgatgc ttgctttcc acatagaaga gttttccatt ttcgtgggt 240
c                                     241
```

<210> 785
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 785

```
aactgaggag ggaaatttgg acatggacac ataggaaga cagccatgtg gagacagagg 60
cagaggtgga cctgctgccg caaaaccaca gggcgccaag tactgtgggc cactgagaaa 120
actaaaggag aggaaggatt cttccctgga gctttggaga gggcgccg ccactttcac 180
```


ctggatttca gacttcagac ttccagaacc atgaaggaat aagctctctt tgtttcaaaa 240
 ccactcagtc aaggcacttt gttacaacag cctaggaaac taatacagga attggtatta 300
 gtaaaatc 308

<210> 786
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 786
 aactgagcat ctgcctcctg tgtcccctct ttcctgttg tacggctaac accagatccc 60
 agtctcttca gtggcactca actttttcaa gtcacaagat ggaagcgctt tggaagagga 120
 gtaaaggacc tggactctga ttccatgcca cgcgaaactc gggcaggcac ttcaaagcag 180
 agagtctcat ttccacttc tgaaaaacac atggtctaga tgagctctaa gtcctttgca 240
 ctcaataatt tcacagtctt ttttattatt aatattattt tcaattgaaa aatcataatt 300
 gtatatattat ggggtacaat gtgatgtttt gatatatgta ttcaataagg aattattaaa 360
 tcaagataat taacatt 377

<210> 787
 <211> 208
 <212> DNA
 <213> Homo sapiens

<400> 787
 gtaagcagac ctctcctgtg atgttctgga tatgcctgtc tcaacagatt tcagggtggc 60
 cgtcttctct gcaaattcag ttctctgatg tgtccaagcc ttttctgcc tataaatcca 120
 gcctcttctc aactcaacag aacattcaat tttatagaat gaggtgttgc ctctattctag 180
 aaccacaata aaagccaatt tgatcttt 208

<210> 788
 <211> 523
 <212> DNA
 <213> Homo sapiens

<400> 788
 agtagactga ggcccaaaaat gcatggcaca gggaagggtt tgacaacttt ttgatggatg 60
 aacaaagaag attcaagcca cttgtcaaca agtcaaagt gattgaaagt ggaagcattt 120
 acccacacgc tcatgcagaa aatgacagga aatcatccag agacacttgt gacagagatg 180
 agaactgtca ctgttgagag gtgctgcgga gatgggtgtc cacggatgac cgttcggagg 240
 ccgacttcgg ggatgtggcc ccattagctc aagagtgggt gactccctac cacactgatg 300
 gcgttggcca ggacaggaca agcctactgc agtgacacag tgcactgat ccctgatgcc 360
 cacgtgggng gtttactttn actaaagccg ggnanaanaa ttgcaacaag anaattgagg 420
 cccagcgnat gagcagccca atcacctggt tgtaagcagc gaagtgtttt ttggctntgc 480
 tentgggccc caaaccactg tgggctcacg aaagaatctt tca 523

<210> 789
 <211> 501

<212> DNA

<213> Homo sapiens

<400> 789

```
aatttatttg actccaagtc cttgatcagg aagacaactc ctaaagataa caatcttctt 60
aaaggaaaat gggactgttt tacaaggagc cacagaatgg tggatctgag aatccaacat 120
agggaaaccc actgcttcat ctaccattat gcgcttgat atgcatgact tcagggataa 180
atgggagcca gaagtacaaa ggaatcttca gtagtagaca aaacgcagaa cccttcacgg 240
tttgaccagg gtcatttgtt gtctgcctgg tcatttgacc agctcttacg aatcaggaac 300
ccagctgaac ctcagttgaa ccagccctc caacagaact gaggggattt ggggctgata 360
agtcantgc tatgtttaca cgnncgcctt ttntaaaag ttgcagtttt tgnaaatgga 420
anctatattt gggtingcata tgatttctat aatgnattac tgncccacc ctgcacatcc 480
tcagagaac agtaaccagg c 501
```

<210> 790

<211> 506

<212> DNA

<213> Homo sapiens

<400> 790

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atatttctc caggagtaat ggtgcctga tcatctgaga ttacatctgc ttcacgcata 60
caaaactgcat aaggcaatga tgttgcagag gctccacatc atcactcagc ttcagaacag 120
acaggagcag cagcaggaaa ggaggctgga aattaaatcg tgaacttttg gatttgtatt 180
ttaaaaatat atctgaaatt atcatgtaca tgaataataa cttgtaatag aaatagaaaa 240
gataaactcc taagataatg taaaaagcta aatattttaa atattcatct ttttatgggt 300
tgagtgaatg tttgatatct catgttatct tgattatctc tgacctctaa atacctggat 360
ctccaccccc tctatnttct tanatccctt tcccnnaag ggaaaagcct gggctttaat 420
tggaggaaaa taancctaaa agcctggccg ataggggaaa ttttttct agttttaatt 480
tgaatattta tcatcaaact gaactt 506
```

<210> 791

<211> 421

<212> DNA

<213> Homo sapiens

<400> 791

```
acgggtctga agaagcaagg actggcaagt ctgatcccc actctgattc tcattgctga 60
atgtctgggt ctctctgtg tacctgctgg ggtgggagac tgctcgcagc atacctggcc 120
tatgacatgc ctactctct ggggtggatc ttggacagga agactgcttc tgccagagta 180
aagaatatga cggagctcct catccgatgg agcctctggg aagaggcgaa gagccagctg 240
gaagcctggg gggcctccgc tgccagcagg acagatgcat caagtcaggt ttatgggaga 300
agtcttccca gaccactatg tcaaacttc tgtccatnct gctataaccn nttcnncgt 360
tnagtnggn ngaaaaccan accanttcan cttggccaa aagctgcaa gataagaacc 420
c 421
```

<210> 792

<211> 361

<212> DNA

<213> Homo sapiens

<400> 792

```
agaactgaga aacctgaag ttatttggat gatagataca gagatacgct gctcagatgc    60
ccctttcaag aaagaacttg ctgcctcttg ctcaagtttc ttctgggagc ttcaagcat    120
ctttgcaggg aagtcacatc ctcccaggg cagcccgact gaccaagaca ccgatacctg    180
aagctatgat aaccttcttg tgaccaggag acaacaagca gaaggccaaa aatacccaag    240
aatggcagag cagaaggatg gaaggagctg ggcttcatta taacattgga gagtagccag    300
accaacaact ccagcaacca aataactctg tttctttt aaanggggta ttaatgacc    360
g                                     361
```

<210> 793

<211> 316

<212> DNA

<213> Homo sapiens

<400> 793

```
tctggtacaa tgctgtcgt cacataagtc tggcttctt atgtgcttga ggaaaaagga    60
ttgaaaacga agatcagaac ccagcgcacg acaatgggat catttttca gacacagcct    120
cctgcttcat ggagctctgc ctttctgcc ggagcaccga cctccgaagc cagcacaaca    180
gacctccag gctgccccca gtctcttccc ctgcccttt gaacttaaca ttgcctgtta    240
gtgtgcctc tggatggtct gtaacctta ccatgctttg agtcaaactg gactgaagta    300
gacttctggt caaac                                     316
```

<210> 794

<211> 556

<212> DNA

<213> Homo sapiens

<400> 794

```
ggcnggtcna nccttnggt ttngcntaa nncngncn ncnngtnga aannggggnc    60
ctnagaaac naaaacatn gtanccntt gatccctna cggngnggtcc caaaaaaca    120
ggaagcttcg aggccatgag caaatatac caagcccaag tggaaaccaa gcttgtctn    180
ccccatctga cccggtggtg cttttgggcc attgggcag ttcttcccc gcttggggt    240
cttcgtttac cgaangtcac ctctacaaa gtacactcgn ggataatcta taaaagaact    300
cctcatcttc cttaagtggg ccctactct tcatggggct ttgggaagg ccctcnttc    360
ttgcttggt cttgggggtg gnaatctaac cgtgnggagc accccaang ggngaaaaa    420
accacaaaan ggggntttct tgnaaaacc cnggctttt tgnaaaaan aacttttt    480
ttaactggg ggggnnggga aagnggnccc accctggctt ggtcaataa ataaaatggc    540
cggaatgtca taagcc                                     556
```

<210> 795

<211> 511

<212> DNA

<213> Homo sapiens

<400> 795

```
attaaaaaa gaaaatgtga atatgaaagc agagagttag agtgaagaag gcacaaacag   60
aaggacattg ggaacaagca gccgctaate atcatcataa cngactcagg ctggatctga   120
gaaaaggaaa aaaagtggat aaagagtgtg cactctgtt ggggcaatga ctccggggcg   180
gaagaggctg aaagaaagga ccaatgcagg gaggaaaaga aattgcccaa ctcctccag   240
ggaatgtaga tgaaaacata tagacacaat tgggagaaaa ttggggcgag ctgatctgac   300
tatgaactgt ttgataaga tgaatgacca gaactcccaa tactncttga gnagaaaatn   360
tcccctgcc cctacaanaa naggtctnga anacactgtt tgaactcaga ccatcacaaa   420
agaacagtat gattattgac ttcaatgag ttcttaca tttatacct aattactatg   480
ctggcaataa tgattatgta gaccataaa t                               511
```

<210> 796

<211> 511

<212> DNA

<213> Homo sapiens

<400> 796

```
actgaggtaa gaagtctgta atttgactg agaatgaaa ccctgctgac atgatgatt   60
gtggcagata atgcaactga ttccatagag atcgcttgag atcacaagtg atgtgaacaa   120
tcaatctgaa aaataaaatt tattcaggcc atcactcaa gagaacacta tgaataggtg   180
ctggatctaa tgaccttca atggaatggc cacttaattc aatccaggaa atgttgaga   240
gtcaagtaga tcaagggaga catttaatga catggggaca agcatggtac cccagggata   300
ttccaggaat tgagacccta ttgtacctc aaacctgaga ttgnatgaat tctccactat   360
ttggggggct tgggtncct tntctcccc tncaaaaaag gnctaaancc atctgcata   420
gctttaaata gaaaanctct attagcaaag ttgtaaatt aactcttaa ggctctttc   480
aaggtagatt aaaaataagc tggaaccctt g                               511
```

<210> 797

<211> 525

<212> DNA

<213> Homo sapiens

<400> 797

```
agaactgagg ctccagggc tgtggggcca aatgtgccct ctctgccct catggcaagc   60
ctcagttect gagtttcat catttcttc ttgtacaat cagaactgag tctagcacc   120
ttcaggacaa atccagatcc ccaggagaga cagcctgatg agttcagctt ggaaagggtc   180
tgttctgtc ctatcagctg tggccagcgt gccagggtca cgtaccagtg cgactgccac   240
agcacggccc atctgtccag gagtagttct cagtcaacgg gctccagctg ggactcagc   300
tgaatagatg cccacaagga tgtctgtac cacatgtaa gtgccccaaa gcaggacaag   360
ggctcaacna gggngggccc cgtttaatna aggggaattct gngtctgtct ganaanaaag   420
tgggcgatga gcaataacaa ggctgtcgt ccatctggaa gaactccagc caccctccaa   480
actttcaggt gcatagaacc acctggacat aagacacaaa cattt                               525
```

<210> 798

<211> 321

<212> DNA

<213> Homo sapiens

<400> 798

acaaataatc tctacagtgg acctcaagac ttcatactaa gattctgaag atgattgagt 60
caatggatga gtgtaacgaa cttttggaaa cttcaaggca attaaaggaa actgcaggag 120
gaccagaaaa gatcaagacc agggcacgag ggctgatcca aacaacgggg gccggcattt 180
gtgatcttgg gtagagccac cccagtgtgg gtcaactcca cagcattagg aaaaccagtt 240
tatcagaatt accttctcaa gcaatagatc tgttccttgt cacattctta gaactaataa 300
agacttatct ttattactac t 321

<210> 799

<211> 354

<212> DNA

<213> Homo sapiens

<400> 799

actcctgcatt taggttcaac tgagtttggga gatcttcccc aatatgccca gtggattctc 60
ccaccagggc caggtaacct tctcaccag aggtgagcat cttgggaaaa agtacatcct 120
gtctttgccc ccagaggtga cttcaaagag gcaggtatgg tcaagagaga cactggaaga 180
tggaagtac ttcagtgttc cagttgctgg ttagccagg gcttcacagc gtggaagtat 240
ggcatcatga tgtctactgc acatctattc ccaaccccat attcagttgt ttcatttagt 300
ctcttgaat ctatggaaac tagaaaacac taaaaataa gccttgattt attg 354

<210> 800

<211> 409

<212> DNA

<213> Homo sapiens

<400> 800

atgaagaaag tgaagtcag taaagatcaa gtagacctct catgtagaca gcgggaaaga 60
gtaagacta gaactcagat ctccaaacag ctacaacagc tctgtttcca gcaatgacaa 120
gttactgggt ccaagaatgc tcttcttgg atctcagcgc ctctctcagg accctctctg 180
cgttcctcac atgtccagat gccacgtgaa caatgaagct tccctgagct ggactgcaat 240
ccagcaagtg gctattcttt caacagtgga gactgggctt cgctgccagg gaaagtccca 300
tttaaggga gaatttgag tgggccggga ctgcgatatc ttgtgaccac agaaagatca 360
aacagggcac cttgagtatg tgagtctatg agttttacca ttgaaaaca 409

<210> 801

<211> 399

<212> DNA

<213> Homo sapiens

<400> 801

ggctcctgct tagtctnaact gagatgcaga aaccggcccc aggggaagacg cagcttgagc 60
aaggtcaccg gcagtttctt ttgcagtaaa atgggaataa aaagaaaatc tacataacag 120
tagatattct gtgaggatta cgtgaattca tatttgaaga gtgagtagaa gggttcctgg 180
cacaagctct acaagtgtgg ctggaatgaa tatgatgatg aggatgaaga tgaggatggc 240
ggggctggag ctcaagtgcc atactgtgtc ctggagcaga agccacgtgt tgaggacagt 300
ctggaccctt aacgaggggt gagccaccga caccagcctg tgactgttta cctcttgagt 360

ttgtttacag gagaanaaaa taaactctct ccctttgtt

399

<210> 802

<211> 292

<212> DNA

<213> Homo sapiens

<400> 802

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actcttgatt agtnnaactg aggaataact ttctctatc ttcaccttc cttttggcta    60
cagccttaag aagaagtggc agaaaaacat ctgagatgaa gagagaccct aggttcctga   120
catgtccagc ctctgagtca tagaggtcat ataaaaaagt aagagagaga aaattgtgag   180
agataggctg ccctaagagt ggaaggcatt gaatgttaca cacagtttgg agtcatttgc   240
agacaatggg tattaacctt tagttttggt catgaataaa tagcttattg gg           292
```

<210> 803

<211> 486

<212> DNA

<213> Homo sapiens

<400> 803

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gtttgctgca tatggttggc aactgtgca ctggacaatg gaatgtggct gaccaggcat    60
tgaggagatg ggaatccaa cccctgaat gctcacaacc gtgcaatcta ccattcccct   120
catgaacgga tgcccttctc ctacttactg catggactag ctgcagtctt gtgaacataa   180
ataagaattt agcactcatg gacattgcct caatggatca acacaacagc ctaataagct   240
gagtcttatt tccagatga agaaattgaa gattataggt gttaagtac ttgctacaat   300
ttggaagcta gtgagtccag gtgtacagg gtaaggaaag cgctgcctat gcgggatgcc   360
cnacctnnng gnaaannctt tgggnaaaaa aatganccta taaagtccta ggaccaaggc   420
ctccttttgg ctgtctctc gtctctcttg gacctcagg cgccccgctt gggtttgttc   480
caagtg                                           486
```

<210> 804

<211> 440

<212> DNA

<213> Homo sapiens

<400> 804

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agaactgaga tgtcaacttt ttgtaagagt cggatgccgt tcttcgctc catcctaag    60
ggcacttggg catgtgcca gcaacattca ctccagaaag ggaatctgct tctgtgcaa   120
tagaactctg tctggaacaa ccaggagatg gtttcatcc acatggacag anattccgg   180
cacctactgg tttcccacc cacactgagt gttgccctct aaatgagtca ctctggttc   240
cacagagagg tcagggtgtc ctctgggagc ggacttcctg aattcactcc accacgttt   300
atctgtgtaa cttgtgcag ggtacctaaa atctctgtta cctcatctgc aaaatgggga   360
tacctaatac ttngagaggt ngtggtgaaa ttaaacgcaa gggcacttgg ccaggagcgg   420
ggcacacgat aaatccattg                                           440
```

<210> 805

<211> 513

<212> DNA

<213> Homo sapiens

<400> 805

```
gagtgtgata tggcttggat ctgtgtcccc accgaatctc atgtcggagg tggggcctgg    60
tggaggtgac tggaccagtg tgctttcctg ttcttcagat tctacaaaga gaaacactct   120
gtttccaga cttgcttaca gcaagggact tagatcccg cagccagagg cactcccg   180
agatgggcag ctgtgcagga ggcatctgtc ctgccgtgca atgtcaggc acaaccagtt   240
ttggagccaa cagtctgac attgacttct tatccctcag acgccagcca aggcagtgcg   300
ttcttgaat caacgctctc aatagcagct tcccaatcct tggccaaagt gatgtcactc   360
aaagccagcg ggtatgacaa aagggnntnt cnacctnan atnggggnaa agttcacagt   420
accctggggn ggctgattnt gcagggtgtt ttttatgcat ttctgaaggc caattaatag   480
cccattctc cagctcttcc aattattttt tta                                     513
```

<210> 806

<211> 161

<212> DNA

<213> Homo sapiens

<400> 806

```
ctgagagcca agaacatcag aggtgggatg atgatgcttg tggctatgag acaggatttc    60
aaggatcctg atgaaacgtc tgctggcctg tatctgtctg aatgctggaa agggctttgt   120
gttactcgaa ctgaaaggaa aacataaaat gatgataatg c                          161
```

<210> 807

<211> 488

<212> DNA

<213> Homo sapiens

<400> 807

```
gaactgaaat ggaggaaaga tctctcttca caagacttaa cattacatgg ctgggtgtgg    60
tggctgaaac ctgtaatccc tgcacactgg gaagccaagg ggaggactgc ttagcccag    120
gagtttgaga ccagcctgga caacacgttt aggagattat tgaacaaga accgaaattg    180
ctccttttaa atcagaaagc ttgacaatat gatggcaata taaacttacc agcaaccata    240
cagacaccaa gaagagccca tcgcaacccc tgggggtgcgc ctggaccatc cttctctcc    300
gaagccccgt ccagtattct tcagctccca agttcaagtg actgncgagc ctcacagact    360
ttnaaaaaaaa cttggttctt ntgtgggggc cncnctnctt tgacctcaca ttntcaagcc    420
gagtgttcat tgttgcggtt cttgtaatgt ttctgcagtt ctaataaaaa caggagccaa    480
aaaaaaaaa                                     488
```

<210> 808

<211> 362

<212> DNA

<213> Homo sapiens

<400> 808

```
attcttgcc caggagtgtt cctgcctggc aaacaagatg tgtacctcgg ggtctacctc    60
```

atgaatcagt acctggagac caacagcttt ccctctgcgt tccccattat gattcaggag 120
agcatgagat ttgaaaaggt atttgaaga gcagtagatc ctggagctgt agtagacctt 180
ttgaaaacg gagaccctag caaggcagag acagaagcgg ctggacatcg agaggagtac 240
attggcactg gcagaacgac acggagtttg gccggggcag ttggaagaga gccggggctg 300
ccgagtggcc caactccagg ggaaaacctat ctccctgctg gctcccccct ctgctgatag 360
ct 362

<210> 809
<211> 336
<212> DNA
<213> Homo sapiens

<400> 809

ccccggact gatgacgttt gctgtatcaa cctgtaagga gaagctctct ccggatggct 60
atgggaatga aagaatccga cttctactct cacacagcca ccgtgaaagt cctggagtaa 120
aatgtgctgt gtacagaaga gagagaagga agcaggctgg catgttact gggctggtgt 180
tacgacagag aacctgacag tcaactggcca gttatcactt cagattacaa atcacacaga 240
gcatctgcct gttttcaatc acaagagaac aaaacaaaaa tctataaaga tattctgaaa 300
atatgacaga atttgacaaa taaaagcata aacgtc 336

<210> 810
<211> 527
<212> DNA
<213> Homo sapiens

<400> 810

agaactgaga ctctttccat gatgagacta ttcacatcat ggcagctgag gactgagatc 60
tctttctatt gtggatgaag gaagatactg tgtgtcatca gaccaactc aggcctccat 120
tgagtcattg tgcctttaca ccaccaccag ggaggaaaat tacttacttt ctaccaagga 180
agcagttaa tcgcaaagct caataccatg tgatgtgaag actcatttta gatcagccca 240
agaaaaacac cattaagcag agaccgagcc tgtggttgaa agatatggag tcacatggca 300
gcgccacac ctctcgaaa gctaaatcca tgactgggcc ttgggtcccg caggctcctg 360
cctggcctgc cccttctgt gctgggaaaa tgggaaaggg acnttggggc aaaatnggag 420
gancctgcc ttgacaagg cacatacaan gggaaagtct gtcaaaaagc attngtttta 480
ctttctttt taaaagaaaa aaaaatactg ttatttactg ctttacc 527

<210> 811
<211> 398
<212> DNA
<213> Homo sapiens

<400> 811

gctcctgcat tagtnnaact gaggaatccc agtgattcaa gagtcattcc agagaaatac 60
acgactgaag atgactgggt acccttctag aaagagggga acaaggcctc cctagttcct 120
tttcttccc agtgaatata ccgaggcaga agagccttcc ctagaaaatg tcttgggcca 180
ttatcttcaa ggggcttcag aacttctaag aagtgtaggt atccttttgc aagggaaaat 240
gtatatgcct taacgtaggc gattttgtg gcaccttct caatgaagaa aaggtgtctt 300

tttctccaaa ctaatttget aattaaccta tcagtcacta ttacacatg aaacagaatt 360
cactccagat tgttcaaatg aaaaacattt ataaaagg 398

<210> 812
<211> 348
<212> DNA
<213> Homo sapiens

<400> 812

ggttctggtt aaagccaaaa ttccagaaaa gacaagtcag cactgcccac ggcaggata 60
cagtgtgaaa gcaactcaaa taacacctgt ttttgaaga tgccacaggc agagtgttg 120
agccagaggg ccaagacact gaggaagaag agccaagcta ctgctataaa gaaggagtgt 180
cccctataa atgaagaaca aagaagaagg agaatacatt attatctact tataaatcac 240
acagagacac aaaaatagt aggtagttag tacgtaaac aggccatata ctagctagaa 300
aggcaaagcc tactaaagaa aaatattga ataaaggaaa tgggatac 348

<210> 813
<211> 407
<212> DNA
<213> Homo sapiens

<400> 813

gtttnagtga ttgggcagag gtgtcatgtg acccaagacc atccaataag ccttgacttt 60
gggatttttg ttggaccgcc tgggaaaaag aagctctcct tccattggat ttgaaatgag 120
caaggcgta gtctggatct gcaggtgcct gccctgcggc cacatggaga gtggtgccc 180
aggactgaag ctacaagga gggaggcaga ggacacggat gtggtgagat acggtcctaa 240
cagcatcatt tgagccctgg attcagccct gcctgccttg aaaccaatac ataggcccca 300
aatatattat ttggaatata tatattgga atatatatta ttagaaacca atatattaga 360
aaccnatttt aaaaagctta taaatngcgn gtgttttgt ttaatcc 407

<210> 814
<211> 442
<212> DNA
<213> Homo sapiens

<400> 814

ggtaatcact ttgatcagta tgaggaagga cacttggaat ttgaacaagc gtcacttgac 60
aagcctatag aatcgaggaga acagatccca ttccaatcct tgtcaagtat gatgtcatgg 120
gcatgggtcg catggaaatg gagcttgatt atgctgaaga tgctaccgaa cggcgccgtg 180
tcctagaagt agaaaaagaa gacacagaag agctgagaca aaagtacaag gattatgtg 240
acaaagagaa ggcaattgcc aaagccttgg aagacctcag agccaacttt tattgtgaac 300
tgtgtgataa gcaatcag aaacatcagg aatttgataa ccatatcaac tcctatgatc 360
atgccacna gccgagattt naagattttt aaccagaga gagtttgctc aaaatgtctt 420
ttcaanatcc cgcagggatg ag 442

<210> 815
<211> 405

<212> DNA

<213> Homo sapiens

<400> 815

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cacttggggc acatgaagac tttgtacgac ctttctctg aatggaaaat gaattctcct   60
gcactcagca tatcaaatcc tgagagactt tcttgaccg actttggcca cctcaattc   120
tgaaatgta tactgattac ttcttaaga tattgttgg cccaaggta tgaacatat   180
gagttcattc tgtgcatgaa gctccccaga gaacaacggg acacaatgtc agtttggtta   240
tggtcatctga aaactcataa gagcagactt tcattaaaag cagtattacc ccagccctt   300
gccttctgag aattcacata tgaataatta ggagtctgta agtaggggcc tacctgnggg   360
acaaatttct cccngggtt ttngaaannn aaaaagggat tttt                      405
```

<210> 816

<211> 330

<212> DNA

<213> Homo sapiens

<400> 816

```
gtttgggtt cggatttaag ctctactagt ccagggatca agtagctgct atggctctgt   60
ttcatgccct ctgagctctc aggagcgtcc agcagcctca gaactggagc accatgatga   120
caggaggaaa agacagctgg gctgctaagc agcagcagag gggacctcac gtgtataac   180
tacacatttg ggtgttctt tgtttaatgt ctgtctctgc catgaaatgc aagctgtaag   240
ggcagagcct gtgtcttttg ctcatgttc ttcccagca cctggaacac tgcatgcaca   300
taacaggccc ttaataaaaa tttggtgaat                      330
```

<210> 817

<211> 363

<212> DNA

<213> Homo sapiens

<400> 817

```
aactgagctg gactggcatt ctatgctcat cctgggtctt tcttgtctg gttggctgca   60
tttgaagga cttgtctgaa cttgacctct ggttatgctc tgaactgtt ctcttaaaaa   120
gctaacatgg agtggctctg ccagccctgg caatgtctca ccacctgtgc atcagtcca   180
gccaaagtgg aagataggat ggaatgcctg acacttaaat tttaattgt tgacatctct   240
aagtctggaa gtaattttgt caataatgta ttagagttac atagctagat tattctacag   300
taagtttatg ggttatactc agtttatttc attcaataaa ttgtataata aacacagatc   360
ccg                      363
```

<210> 818

<211> 433

<212> DNA

<213> Homo sapiens

<400> 818

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agaactgagg ttctaattgg caaactggca aagtctctgc tgttgccctc acctccaagg   60
ctggtgctcc tggactcagg gtgtgttcca ggtgcctgaa gcatggccca caccagaaaa   120
```

aggtgctctg taagggcaga aaccagggtcc tcacaccatc ggtgcatgat aaaaattaac 180
 tgaccaaata acacgggtgt accctcttca aggcaacttc ggagtcagac atgcctacgt 240
 tctcttctct gctctgccac atgtgtgacc ctggacaggg tcttccatcc tcttggcctc 300
 agtgtctttg ccagcaagct gggaataaga atcctgtgtc atgggggtgt cataaggggg 360
 aatgagatg acctaaaggg ncattttta acntaannaa atgccttca aagcaaaata 420
 aaaaaggggc tta 433

<210> 819
 <211> 88
 <212> DNA
 <213> Homo sapiens

<400> 819

gcataatttc agagaacctg taagaaacct cttaagcta ttgcaagaaa cactcacttc 60
 taaaaataaa gagaaatctg ttctcct 88

<210> 820
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 820

gcctatccac agctcttcaa ataaagcgt gngangnnag cnaaagtga ggggctcctt 60
 gagaacttcc cagggctaac cagctgctga ggagtggcct ccaggaaaga gagaagcact 120
 ctgattcagg cagtgtatta cacctaaaat accaactcca tcatatcttc agaacaattc 180
 ttctagacct tgcattctaaa tatggagtgc ttaactaaca acgaacaaaa cctctggatg 240
 gccgaaggac ctaggctata cagaaagctg tgaattacca atgagaacgc agtgagtcaa 300
 aagaataatg gaattaaata agttcagagg ctttaagtgt ttcttaaaac acttatctat 360
 gaaccctctaa tcttagtcat ttctggcaca gttggtattc ataagcattt gatcatcatt 420
 ctg 423

<210> 821
 <211> 234
 <212> DNA
 <213> Homo sapiens

<400> 821

ctagtctctt tggagatgac tgaatggcatg aattctactt gcatggagtc cccgagaaac 60
 cactcctctt ctcaaaaaa gtacactaaa tctcaggaca aactgggatg accagttatc 120
 actgctgcca accctgtttt gtgaattcca ttaagatgt ccaactgaga acaaattatg 180
 tctcaataaa gattgtattc acagaatgat ggaactaaag ttcttggtaa attt 234

<210> 822
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 822

gattgaacc aaagctgcca ttactgcaag aattaatgct tattgccaag aaattcaa 60
aaaggaaact cattggaaat gttcagagag gaaacgatga cagtataat tccaaatatg 120
atgctttctc cataaactat ccatagagat ggcacagctc tcgatcaacc ttgcctggt 180
tggttgaaa tgttttaagt ctttgacata aaaattgtga aaggactcgt cgtttccaaa 240
gtgagatgaa gattttgta ctgctgttta taaaatttt ttcgttgtgt ticc 294

<210> 823

<211> 451

<212> DNA

<213> Homo sapiens

<400> 823

cacgtggaaa gcaagacccc tgagggcgca ggttttagtc aacttcatt cagtgccgt 60
tctacagagt tgaacacttt ccggtacatt aaatgctctc gttggtcag aaagaacact 120
ttgaaaagcc tgtgtttga cgtctactca gaagtattgg aatcaatgaa gaggggaca 180
ctgaatcgg atcctctcta aggaatcgtt tccagaata catcaaatgt tacctgctt 240
gtaaacctt ccaattctct caattccctc tgcattcatt taagcactga ccatcagacc 300
ttcctgtacc tagacagcag ctttctattg gattctctgc ctcaggcacc gctctctcc 360
attcaaacct tcacaatcat tatctctaac gtgaagacca tgccgntca gggaacccca 420
gaagggatcn ingaaccttt ccaaaaaaaaa c 451

<210> 824

<211> 404

<212> DNA

<213> Homo sapiens

<400> 824

aacattaag gaagtttcta tttaaacca gccttgagg gtttcatga caaggaattg 60
cacattggat gatcatttct accttttgca ataactactt cttattgca agttgtgtt 120
aagtgaacaa agacaatgat acctgttga gctgtaggt aggaagaacc agcgaagcgc 180
acagttaccg gagagggtat ttgcccaatg ttgagaaaca tatgtgtgta ttagaaaaa 240
tcacatcgac tcccaggaat cctgcaacat actgcaactg tgatgctgac cagaatgagt 300
ggagatttcc tcattgattc tctgtgtgag atgcagagt atcattccac ttgaatctgt 360
gaaaagtgtc tgattaaaaa tcatacngat aattaccatc cggg 404

<210> 825

<211> 387

<212> DNA

<213> Homo sapiens

<400> 825

actgaccgga atgataacga cttgcagcgc ggtgttgccg tcccaacca cccctgttt 60
ctgacaacaa gggagcgcgg gagaccggag cgtgaaccc aaatccctca gcagttgcac 120
ttcattaagt caaatgtga caagaagctt agagagcaac ttgcagatct gatcacacag 180
aacaatcagg gaggaaactt tccaggagt ggtcgggggt ggaggaggga ggggagggcc 240
anagatgtgt acgtacaggg accaggacat gcacggggtc ctgtaccca cctgccagg 300

gcaggtgtcc tggctgatgg gagcagggaa gctgtccctg ggtgggatct gggaccctgg 360
gatactggga ccccatgtgg ggcctaa 387

<210> 826
<211> 335
<212> DNA
<213> Homo sapiens

<400> 826
gtaatacagc aattcactgt acgatttaca atggtgcatt agcaaccgg cagcagtgtg 60
atgtcagagc ctcaaaaaga cgtatgcaag agaagcaact gggcctggtt ctgctgccct 120
ggccccagt caaggctgct taaatgtcac caactccagt cctgctctgt tccacagcta 180
gtcctggctg tgattttctc ccaaatagga cacagatatt aactaagggt ctgggaagag 240
gaagcaaaag aaagagaaaa agcaaaactac tgaatgcact aaacattttt ttaaagtttt 300
attgaaagga aaatagaggt taactgaag gaaac 335

<210> 827
<211> 241
<212> DNA
<213> Homo sapiens

<400> 827
tgatgcaaga tggtccttc tgagcagagc tcccctcgct cagtgtcctt ttgttcacg 60
tagaagatct tcttgagggg actgtgtggc cagtgcagcc caggcctccc caccctgcac 120
cgttcaacag aagagcagct gacgcagggg gccctcaaca tgctcacca aaagtcagcg 180
agattctgca ccggcccact agccttccaa ttgtaacta aaaataaaat ctggccagg 240
c 241

<210> 828
<211> 419
<212> DNA
<213> Homo sapiens

<400> 828
gcagagaaac agatgaaatg actcactgag gagggaagca ctgggatgcc tcctaacctg 60
ggacggcttc ctctctgca gctctgtgt ttgtcagtgt ctctctgga tcaggcaggc 120
ctcagacctc actaagctat tccactcaac tcttcttcc cgtgcttctt gactccaagg 180
tatcaggcaa acttgttgat ccatttagac ttactctca cctgcttgt ctctttctt 240
cgcgcacacc agagctaccc agaaccgagg tgatgccttt cctggcagg gtcaggccta 300
ctgtggcagt gtcataaacc ttcttaagc aggatttgtg aagagggcaa aagctggcat 360
cagcaagaca tgttttggtt tagacgtctc agtagacatt gcagcaagtt aactattgg 419

<210> 829
<211> 440
<212> DNA
<213> Homo sapiens

<400> 829

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gtccttacct gaagcccaag gtgatttttg gccgctggcg acctgtgac cgttggcagt    60
gggtcagatg tggcactcag aattagggga aggattggtg atgccagaac atctggtgaa   120
gccggcacct caaggcactc ctcaagcctg gaaagcctca ccaataggat tgatccagaa   180
tatgttcag caaaaactac agcagagtaa ctttgacaag aaaaatgttc acttgctacc   240
taaggagagt ctctgtctcc tgacctctga atttcgaaat cctcagctct ggctgccacg   300
cagtgggaac cgaatgagat ggctgggcag ggttctgcaa cacagcagaa accccaggct   360
tccaagacc caggatcaga actgnataat gncacttctg cctcactttg gtggacnaaa   420
gatttcacaa agaattttt                                     440
```

<210> 830

<211> 464

<212> DNA

<213> Homo sapiens

<400> 830

```
acagagtctg gctctgttgc ccaggctgaa agtgcaatgg gtgcaatcag aatttactgc    60
agcctcgacc tcctgggctc aagtgatcct cctgactcac tcagcttctt aagtagctgg   120
gactactgga aaattaacct cactcagact gaggagaaca gaaactctt gagaaatctc   180
acaaaatagc catcataatg tgaagaagcc gaagcagcct gtgaagaggc gctagtggaa   240
aggaactcag gtgcccctgc cctcagtcct agctgaacte tcagctgaca gccatcacca   300
acttgccagc cacaggagtg agccaacttg agagtggatc tttagtccc agtgagacca   360
tctcagctga cacacatgg taaaaagatg aaccatcctt gctgatcctt gccagtgctg   420
cagatacata agcaaaataa atgggtttgt tggtttaagc cact                               464
```

<210> 831

<211> 480

<212> DNA

<213> Homo sapiens

<400> 831

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atcctcccat acagtggcag cctggggagg cattgccaac aattacaaca gcccttctca    60
tttgaattga atggaaggcc aaagagcatg aggtctgaag tttaggatgt gaaggagaaa   120
agaacataac ctcaaaaacc caattttaat gatatttaaa aggcctattc cctccagaaa   180
tgtcaacatt actcaggagt atagcaaaaa acagcctgga gtttcatga tgtgaacgtg   240
agaccaaagt cacactgagg agagattaaa ctggaacat gattgccagt aaagaagata   300
actctgcct agaaaaagcc cagctgggtga ctccggttac agaattcaca accacactgg   360
gttcacaagc cttcttccc acatggaagc cccctttct taaatgtccc agattctctc   420
ttcttagat tggatgccag tgcctctctc tcataaaaag tctcagctt ttgaaaaaaa   480
```

<210> 832

<211> 319

<212> DNA

<213> Homo sapiens

<400> 832

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tggagcctac tgacagcaac gtgacaaaac cactctcttg ttgctttct cctggactat    60
```

cctgaatggg gaagagaggg gtggaattac aagtaggtg cttcaattt gcataaccct 120
 ggataccccc ctgtgagggg gtgagggcatg tgaagccat ctgtgttga gcagaaaaca 180
 agttgagagc tactgaatca gagcattcac atcaaagaat gaatgcaaac tggtctcac 240
 caccagaagc catgttcaca gggagaagga gaatggacag agactctcaa ataaaccaca 300
 aaacaatggt gaaaaaac 319

<210> 833
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 833

gccctctgc gcaagtaact caccatcttc ctgtgccag ctatcaccac gacacctgca 60
 ggtgagctca ctgcaagctt ggcgtcgtgg tgctgacac agccctcttc agcacacagt 120
 gtcagaccg tcctataaan tctccagcca gccttggtt ctttgagtc ggcattcttc 180
 atgcaggctg ccctgtctcc ttgcaacctt ttttctact ttctccaata aatcagcctt 240
 ttctgcct 249

<210> 834
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 834

gtggggnnnn taannngctg nttgaccgcc cncgtggagc tctggtgatt ttctgaggaa 60
 aagnganctt gaccgactaa accgagagtg cctcagagag caaataccca tcgncacgt 120
 acttctenct ttcagacgg gccttggnat gaaccctaac tgttcacaga ctctccaca 180
 ggccccattt ctatgcnatt ctgtggnctc ctgantcttc atacccaaaa actangaaga 240
 acctccagag gggacacacc gccatnatga gagcctggct gganctggac tcnntcttc 300
 tctgcaagat gaagcaccat ntcgaaatga acngcagagt ccgaccccca ctgctggtcc 360
 agcgnngata tgaggtgtgg actggaatgc tcttttgcatt tatnactgg ggccatgatg 420
 tgccgaaa 428

<210> 835
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 835

taccactaaa agtggaataa cgattattg aaccagga ctctggcaca tgctttatga 60
 gattcatttc ttgcaccct cagttaagga aagacactac cattcaaata gacaagctac 120
 ataagacaga ctaccgtata cactnggaat cagagtcct caatcaagaa agngggattt 180
 tgtcgtctct tttctgtta aagaacctg ggtttaagac aagctcttc tacctataa 240
 aaccatttgg ctctaaatca nattaaggaa gaaaaggga gaagcctaaa ggaaaatggg 300
 gtcatggcaa aaaatatttc cgggacaaat ggtccacca tgaatggcct ggaaagaact 360
 ggcttcttca tttttaact tgggggataa aaagaagggg acattcttc ccattcaaag 420
 gaagcttgc tcttgaatt tgggtctatg gtttcttg atgccattt ttacttaaa 480

<210> 836

<211> 447

<212> DNA

<213> Homo sapiens

<400> 836

```

gtacacctgg agtcctaagc ccgggagaag agggcacagc cccacttct ctggtaccag   60
tagggccctc ttacagagaca gacgtgccta ggaagggtgca ggtcctctc tgctgaagat  120
cctcacattc caggggtgca agagggggccc ctgcaaagtc agtctgtcga gacctaagtc  180
ttggtgttat ctacttaaca agtgaagggg ctgagaggaa ggtcagagt actaacaaaa  240
ccagtcctga ggccttgaca cctgaggaca ggattgctgt caataaaaat gtagctgacc  300
ttaagagtca cagcctgaaa gaatctcaaa atggntctaaa gtatatggga agctttctt  360
ctattctgg taccttaaaa gagcatggca aagagcactg tggggcagaa ggaaggatct  420
gaaaattcca ttctgatgag acatcta                                447

```

<210> 837

<211> 453

<212> DNA

<213> Homo sapiens

<400> 837

```

gttcctgtg gctgctctga gaattctccc accatagaga gatgggtgat cccttggtc   60
tgcataagt caccaatcca ggcaccatgg aaggactctg tgaggagggc ctcccctctg  120
agaagatgcc tagccagcag ggacctcatg ctgagttca gatgggtgac cagacagatg  180
aaaactccag acatgacagc tctcctctg aggccttggc tgggttcttc cagccacacc  240
agaacagcac cccacctgca acacacaccc tcaccaagc cccaccagaa tactgcacat  300
cggctatgtt tgcagaata caaaacaga gacagtttc agaaagatat tctttattgt  360
cataagttgc caggggtggg atggtaagc gagctggcag aggtctangan gaaattttg  420
gtcctctgac tggagaagt atctgggtgt cac                                453

```

<210> 838

<211> 406

<212> DNA

<213> Homo sapiens

<400> 838

```

aggtgagttt ctacagcat ctaacaggc acccaaaaaa ggaggatgga aagagacatc   60
aagtcagaag aatggcactc acattctctc tctgctggag attaaccaca tgcccttcta  120
tgatgataca actgcagatg agcagagacc ttaaaatat gagctccagt cccaccttc  180
ctggccttgt tgtggtatag gactacggc cctgctcccc ttcttgagt caatctaga  240
gatctggcac atccttcagg ggagatctag aataattcac ctctttgac atgetattca  300
ctatgcttag gtgaactctt ttccagcatg ctcccttact tcagctacaa tcttacttgc  360
ttctagctat gcttggccag tcaatataaa cacacttga taccat                                406

```

<210> 839

<211> 116
<212> DNA
<213> Homo sapiens

<400> 839
aaccaggaac cataatctca cactgggatt atggactgct gtcttctata tcaactgctga 60
gccatggacg gagttggaca cagggcaaat aaaatgccac aaagttttct accatt 116

<210> 840
<211> 392
<212> DNA
<213> Homo sapiens

<400> 840
atccagagga agaggagatc tgactgtcat ctgcacatgg aacaacagaa actgattttt 60
taagatatgg ttcatctga tgcactgtat cactgcctaa gacagcaatc ccttgatgtg 120
ccagagattc tgatgcccc ttaggtgatt gctgggaact tgttttctg ttctcttt 180
tgggatcata attggaaagg tctgatcac aaataatatt tgatggatgg gcagcatttt 240
cggcaaggac acttgcagtt tctgaaatat ttaatttggc gattactggg gaagaaacat 300
agaattcatg gtctttgtct gtagcttctc taagatcatt ctctttctgn gaatattctg 360
gttgaccaat aaaagcaaca ggttgggatg gt 392

<210> 841
<211> 444
<212> DNA
<213> Homo sapiens

<400> 841
atacagagtt gaagagaaga gaggaccagg gatccaccag gcaactgcgt tacagaaaga 60
aagtcacgca caggaaaagc agatttctga ttctgccacc aggaagggtc aaagtctgga 120
cagcacttgg tcaggagcct ggcttccctt tcttgaaaaa catcacatgt aaacatctaa 180
ctgagagctt ggtacacagc aggctctgag tgttggcccc atcacgatga caaccaaggg 240
ctaattatga aataaggagg acacaagaaa agacactatc aaggatacag tttttttaa 300
aagggtggggg aaagttcatc tttttttaa aaagcatcca tagacttaa attttttgt 360
ttgggtctg taaaaaaata gcaatatggg tgaacgcta tgataaaaaa ttgcccaat 420
tcttgttatg taaaatggt actg 444

<210> 842
<211> 300
<212> DNA
<213> Homo sapiens

<400> 842
gttcaggaaa taactcacca gaaaatgata tctgagcaaa gacctaaaga agaagcagcg 60
agctatgggg atatgtgcag gaagagtatt ccagacagag ggagcctcgg tgaaagaccc 120
tgtgtggga gcatctggc ttgctcatgg ggcataagg aggccagtcc acctgcagca 180
gagtcaggac agggcttgg ctttgtacaa gcttaattaa gacaaagaaa cagtaaaaca 240

cccagaataa aacactttat aatctggaga tcattaataa aactaaatac ggatttaaat 300

<210> 843

<211> 214

<212> DNA

<213> Homo sapiens

<400> 843

ggatcagttc ttgctcttt gaaacgaaga tgatccgtct cacactgaaa gtttcctatc 60
gtgaggttca gtgtcatcta gagtcaacgg atgaagtata agtgttcact gtggaatttc 120
tacaacacaa aaagaagagg ctggataaag aagataaact gaatttgaa actgttcctt 180
ttccattaaa aatagcaaa aaagtttcc ctgt 214

<210> 844

<211> 422

<212> DNA

<213> Homo sapiens

<400> 844

gcaagcagaa ccctggaatg gcttctcag accctgtcct gtcagactt cacttctgt 60
cacttcccc ttgttactg tgetccagac atgccactga ctgtctggc cagtagctc 120
cagtcttcat agagaaaact ggagaggctg tctaacttc acctcagcat tggccgtggc 180
agcgagggcc tgcctgtgt cttgtgcgtg ctcaccaccc ttctctgtt acctctgcat 240
ggcgcataaa cactaggcac agagactga aaatcatcca tcttccaaa cctcaccgaa 300
ttcacaactg gccagcacta gagaggaccc tgacctcatg gctgcacagt cactgggggg 360
tgcagacagt aaatccggga tcaactggaca agtcacactg caacaagtgc tatgggaatg 420
ca 422

<210> 845

<211> 463

<212> DNA

<213> Homo sapiens

<400> 845

tcccaactgn ggcaactggan gtanagcagc aatgaagaca gatgtagtcc tggcattcct 60
caagcttata gtctaataagg aacgtctaca ctgagaaaga aaaaaaagaa aagaaggaag 120
aaaagaagaa acccttctct gacacttcat agacaaaaaa caagaggaga tgattattta 180
agttcatcag tgggagtggc acctgccctg tctactctg gttactaggg aagtaacaga 240
ctccttgaa aaaacaactg tgagatggag aggggaagggg tgaaactggg aaatgctaaa 300
tctgaattca gagtatctgg cctcatcatt cagatatttt aagggataaa gggaagtgn 360
cgggnggaaa tctgaaggng aattaaataa ttggaagtta tgatgaattg ccattccatc 420
tngtattgc cttaattctc tggctctggct cttctacctg cca 463

<210> 846

<211> 230

<212> DNA

<213> Homo sapiens

<400> 846

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gtgatgtaat gaggactcat atatatgcac atggagtga taaatgaatt aaggaatgga    60
tgggtgaaaa caacgaactg tgaatggtcc agccatcacc aataagacac gtaacaactt   120
tcccacctc gcttcacgct gccaggcaac gcaggctggc attgtttag tgagttgctt   180
ctgttcctca caagccagga tttaataaca gaataaagga atgaactcgc    230
```

<210> 847

<211> 391

<212> DNA

<213> Homo sapiens

<400> 847

```
gcttgccctt tggaagcagc caccaggctg tgaggaagtc caggccacat ggaaagacca    60
catgtagata ttctgaccaa caggcctggt taacgtctca gatgtcatgt gagtgagtga   120
gcaaccatat cctctagca cccagccttc gagtcttcca gctgagatcc caggcattgt   180
ggagcacaga agcgtcattc cccctttgct ctgtccaagt tctgatcca cataatccat   240
gagcatacta aacgattgtt gtataccact gagtttgggg gtaatttgc acacagtaat   300
aaacaattgg aacaaaaaaaa aaaaggccag ngnggccaat tcaanttga ntnaccnng   360
gtngacttng tnaaagggg gggacttccc a                                391
```

<210> 848

<211> 442

<212> DNA

<213> Homo sapiens

<400> 848

```
agagaagagg gtgtttccaa gggaaagctt cagaagccca agcccagcta actttctggg    60
aagccctgat gatacccca ggaacgcagc aactgcaaat caaacctcat caaatggca   120
ccagctgacc ctctctcca cccagggttt ctcaacaccc ctggcaggat gcgaggggat   180
gaggagtctt cgggcttggg cccccgaact gtggtcatca ttcatcaga tgccagctgt   240
gtagcaacaa gagttgctat ggaaaacaac cactacagca acagactgaa atcactccaa   300
aaaaggagcc gncactcatt ccaccaacat accactgggg acgcgggaaa gcaaaaccct   360
tgggttaaga acaacattcc cactcccctc cccagtttcc atcctagtaa aaattctcgt   420
gcttgtttgc attttaagt tc                                442
```

<210> 849

<211> 106

<212> DNA

<213> Homo sapiens

<400> 849

```
gtgangacac ancaagaggc accaccttgg aagcagacag ctttcanaga ggagnngaca    60
ccttgatctt ggacgtccct gcctncagaa ctgtgagaaa taaatt                    106
```

<210> 850

<211> 438

<212> DNA

<213> Homo sapiens

<400> 850

```
ctaaacaagc actggcctca agagaagcaa tattaaca attgcagct caccaccagc    60
cgctgactaa cggcgccccc ctgtccaac agcccanct acngcntga ttggacaaga    120
ggctgatttc agttanctc ctctgatga gaaaaccaca gccatggact gattctggcc    180
gntttacana ggntgnnac ttgntgcct ttgagtccta aaaaggaggt gtagggccta    240
attgtaatac atgtaaatgt taattctnca ccccaaagca cacatggta tatnacacc    300
agccgtgtta natgnacaca tgcctcaaga ccacctcat gagtattga agctcttcgn    360
ataacctgtt gactatngta tgtttggcc aacctgtca actaaaaatt tctgtntaat    420
tncctctctc cctcaaaa                                438
```

<210> 851

<211> 224

<212> DNA

<213> Homo sapiens

<400> 851

```
gaaatgaagg atttcttatt ctgaggaagg gagagacgcc gaggaagaca ggacttgagg    60
tttactacc ttggtattc gaactccct ctaactgtt cctgtactag aaaccactc    120
actatggaga aggaaggaga ggggctgaac tgatggacaa acgttgtaa taataggtt    180
tatgtaatcc acatataaat aaattaatcg cctgactcgc tccg                                224
```

<210> 852

<211> 458

<212> DNA

<213> Homo sapiens

<400> 852

```
ncacanntga gatcttggt gnttatgaan canggaacaa gcnccgntt tnagaagcaa    60
gctcaagaga tgatgaatga aggaagggtg agctccgaag accatgaaga actgctacag    120
aagaaaacaa gctttcaata aaataaaaga gacatcaatc acacatttta cccatttatg    180
aaacatgctc aggacaaggt actcagacgt gaagaagcat tccaggaac catcttgag    240
aactggactt ggtaacatga gagctgggaa gtccaattc ttggtcatga agagtctacc    300
acgaagagaa ttggttggga aaccagaagg ctaacttta catgaggcac cagggttat    360
gccccccaga tttcagaga aggacaataa tggggtattt ctggatgttg aaatcctagg    420
attgatctga cagcacaac caaatgccag cagtttcc                                458
```

<210> 853

<211> 438

<212> DNA

<213> Homo sapiens

<400> 853

```
atgtttgcat cctgatgaac tgacaccact tggaccatg actcatacca aggaaataaa    60
tcaactggtc ctgtaactcc caccagaag ctgactcggc atgcgaagac agttccaaca    120
ctctgtgat ttcatctcca accaatcagt agcaccatt cccagcccc ctgcctgtca    180
```

aattatcctt taaaaacctt accctctgag ttctcagaga ggtggatttg agaaatatct 240
 cccatctttt ttcttttac aactggcaaa tatagatgag tctgtagcca taccagacct 300
 atgtggccca actttcacgt aacaaaagta agtacagnn ttttaagtt gccatnggac 360
 cctcaaggct atgtaatctg agcatgccca gatggaccaa gtgttcaacc acagagggaa 420
 cctgattgct ctgactca 438

<210> 854
 <211> 160
 <212> DNA
 <213> Homo sapiens

<400> 854
 ttttattcac agatgaccag accaccagag agacctatcg aagtctacat ttcaaagaac 60
 ttgcctcac ctgtgttgat aataggagga actacagcaa gagggtaaaa atttgtaga 120
 ataacttga taatggataa atctacatct gctatatccc 160

<210> 855
 <211> 138
 <212> DNA
 <213> Homo sapiens

<400> 855
 ctactgcat taagtcanca actgaggaac caggnaacca taattctcan actagggnat 60
 tatggacttg ctgtctntna tancactgct agancatgg gcggagntgg atacagggna 120
 taataaaatg ccacaaag 138

<210> 856
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 856
 gtgggggtctt tcagtgcctg tttcccgcc cacgtggagc tctcatcatt tctgagtaa 60
 aagtgaactt cccgactcag ccgcaagtgc ctcgagagca gagaccatc gtccacgtcc 120
 ttctactttt ccagacaggc actggcatca acgctaactg ttacagact cctccacagg 180
 cccattttct atgcgattct gtgttttct gaatctcaa acccaaagac taaatgaacc 240
 tccagaggggg accaggccag agagagcctg gctggagctg gacttctctc ctctctgcag 300
 atgaagcagc ggccgaaatg aaatgcagag tcgaccccca nctggttgtt ccagggggga 360
 tatcaggggc atctgtttct ttcttttga ttctcagngg ataccatgtt gcacgaaatc 420
 tgtggctgct tttgtt 436

<210> 857
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 857

tgtgtacang caaatttctg ttgtgcctgg gaagaaggaa atttgagta aagaggaggc 60
 ccgctccata tgcctgtca caagtacact cactgaaaca ttaattcacg aagagattgc 120
 aacaagacca aaacgaaaga ggaacagggc ctgacaatgt tcagagaagg aaagccgaag 180
 aagtaacat cccaagtta aaaatgacgt ggggatgaaa aaataggtg cctgtgtat 240
 ttgtcattga aatgcacaat ctgtttact gtttatctg agactctggg agctctctg 300
 ctgcttagga aaaagaggc aaaggnttan gaagaaatgc ttggccttan naaagagagg 360
 cnttagaac cctagagaga atgggaggng taaatagtat gtgggcattt ggcaatcacc 420
 acaaagaaat gggagacaaa aa 442

<210> 858

<211> 443

<212> DNA

<213> Homo sapiens

<400> 858

ttctccagc ataaaaacaa gacaaagttc ctgcagagct gctctaacc aataataaaa 60
 ttggacaata agctgcatat ctgccgaaa cctgggactg gcaatggaga tgagaagaga 120
 atcagaaggg atatgtctga tgacatagaa gctgtggaat ccattcttca gggctaaac 180
 tcaagcctgg tcttagttc tccgtactgt attcttctg acctccagac ctgagcgcc 240
 tcccttcaa aagacaaagc catccaaaga gtctgagcac tccaagtga cagctgaag 300
 agtgagagac gtggacagag ggaagggcag gtctgngcaa cctgngggcc taaaccca 360
 cctntggcct tntccagnga agccacactc angatttaag agaacttgtg atcaactgg 420
 ggtatttga cccacgaaa aga 443

<210> 859

<211> 312

<212> DNA

<213> Homo sapiens

<400> 859

gtgggagat taatgctgtc ctcaaagtga agagtcacca ctactgtca agtcatgtca 60
 tctctgcagc cacgtgcatt ttgtaagctg ggaagaataa acagacattt ctgacattt 120
 tgcttgagat ttaacctcag cgcgtcaaga gatagagagg ggaacagaaa taaataaaat 180
 gtggctaaat aaggactgtt taccacaaac acaaggcaga gatctgggtga ccatatctga 240
 ctttgaaatc tgtgtctcca ggaagaggaa catcacacac cagggcctga tgtggggtgg 300
 ggggaggggg ga 312

<210> 860

<211> 418

<212> DNA

<213> Homo sapiens

<400> 860

tgtctcagat ttcaggagaa ctgtgaccca tgcagggggt ttgagtccca gtgaaagtgg 60
 agacctgtc atcctgagaa tcgtccccag ggggaaacca tcttttcta aggcggaatt 120
 tctcaacggt ggaactactg acattttgga ccagtgttca tggaagcctg tgttgagaga 180
 gccacagagc aaagtatctg ggaccactga gtcaccatat ggaggagagc tacctggaac 240

attcagggtg gacttcgtat aagtgaagg tcaacagatg tcctctctgt tcctggtcac 300
 cgtgctaggt gtggaggaca cagagaggga gaagaccttt ntngctttt gggagctanc 360
 aagccggtag aaaactnta agcaggaaag taaaatgatc agggttttaa aactcaat 418

<210> 861
 <211> 262
 <212> DNA
 <213> Homo sapiens

<400> 861
 ggttgtagt ggacatcatc cgagcaaac ttgaaaagt cttatatgac tgggcttacc 60
 tgtacatgtt cctgcttta catgagaggc acatgcctcc aatataacca ctggccaag 120
 aaagatagga aatacatgga gaaaacctgg ttctatctg aagtttgag ccacccaac 180
 aaaaaaagc ctgaagaagg ggcaactcaa gccactcaa aacacatgag caagaaataa 240
 atgcctattg ctgatgccac tg 262

<210> 862
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 862
 gacaccacga ggcaaggaa ggaagagcga gcagatgtga gctcctaagc acggccgtct 60
 ccaccactg ctgcaactct cagccttccc agacacagcc tggttttcc tactgcacat 120
 ggcacttca tgaaggccg cctgttctca catctatctc ctgaaactcc ttaggagtg 180
 gagacaaacg ggcacaagta acttgagttg taaagttcag gaaaatttag ataagtgtt 240
 gatcataaca catcagctgg ttaatggac catcttcga taaaacatt catccttg 298

<210> 863
 <211> 156
 <212> DNA
 <213> Homo sapiens

<400> 863
 gtctgagggtg aaaccagata atttgctgaa catctaagaa gcttttagga aactacactt 60
 cggaggagag tgctgtgcat tggaaaattg gaaacatctc aaatattaca tgaggctttt 120
 gcaggcggga ttaccacgca gcttcctgct cctgcc 156

<210> 864
 <211> 12
 <212> DNA
 <213> Homo sapiens

<400> 864
 attcttgcca ag 12

<210> 865

<211> 180
<212> DNA
<213> Homo sapiens

<400> 865

```
gtgcttcctg tattaacatc cttgcaagtg gtacctgcct ctctgaggat ccagctacgc   60
aatgaatctg agaaagctta aaatcggaaa tgctgctcta gtaatgggtc tcaaaccctg  120
gtggtcttga catacaggtc ttattaaaac acagttgctg ggctccacct aaaaaaaaaac  180
```

<210> 866
<211> 182
<212> DNA
<213> Homo sapiens

<400> 866

```
gatctgggtt ggaactgctc tgcaaagata agtggagaaa actgtttatt tgtaagagaa   60
agaatgatga tggcagaaaa aggagagctg aatgcagtca ctaagaaaat ttgcaccct   120
gagactccgt accacgatcc tgtaacatta gcaattatga aaattattaa atggttgata   180
tg                                     182
```

<210> 867
<211> 457
<212> DNA
<213> Homo sapiens

<400> 867

```
ggatttgcgt actctattat gaatttctct ttgagaaata atacctgtga gaatgctgct   60
ccttcaatta ggttcaggat tggaggaaaa atcatataaa atagtggta atctttcttc   120
tctagaaagt ggcaacgata tatagtactg ttgaaccatg cctgccagtg tcaattcctg   180
aaatggcaaa agaaaaggga agaagagaag ataatgctat aatgatcagc tcccaaaccct  240
ctacttaaag cataaatgga gaaaagaaag ctcggtgtag tgctacggaa cactattcgg   300
cattaagcag agtaaatagc ttagtcaaca gtgtgggccca ttgtcagtct ttatttgtca   360
tctctcactg agtgatcaca actcagcctc ttatgtgtcc tggaagtgtc caatctccaa   420
gttaactatt tattaagagg agatgcatct taaaagg                               457
```

<210> 868
<211> 259
<212> DNA
<213> Homo sapiens

<400> 868

```
gaactccggg tgaggacgac aagagctgag ctcgggtgct tgccttctgc actctcggga   60
ggaggcacca gcatgggcac ccttcacagt tcgggccctt cactcacaaa cgtctggcac   120
atggaaacaa gctggcaaaa agattgtttt ttcttccgt actttttgtt ataagcctgt   180
ggtgaagtgt ccatacttg cataaatgaa tgtgagtggc cttgggaatc taaatataac   240
atgtttctaa gttacacac                               259
```


<210> 869
<211> 436
<212> DNA
<213> Homo sapiens

<400> 869
gaaggaggct gccctgcctg gaggtaagag tgcattggagc agtctcagcc gaccaggtg 60
ggatgcgtaa catggccgag aaatccaccc atgctgctga gagctactgc gccatggggt 120
catgtgtcac ctaactgact tagccagcc tgactgatcc cccgtgtgtg accagacatc 180
agcacattca gaggacctca tactgggaat tgggtggacct ttcagaatgg acatgaccac 240
tcaaagtagg gacattactc gctatttgat ggcccatgtg ggatcaaagg cactggggt 300
tcctcaagg cacagcacac ttagaatccc ataagtcctc agttctaagg catgtatttt 360
tcatacttt gataattctg aaatcaaagt atagctttct agtagatatt aaaactcatt 420
ttcagaatcc tgcaga 436

<210> 870
<211> 458
<212> DNA
<213> Homo sapiens

<400> 870
gcctgggatg acctctgctt gtttcaacc attattgatg cgcaattat gagaggatga 60
tgtggcaaaa tgattgaaa attggaagtg atttactgca caactaaat atttgtctt 120
atcattacag caactctata agtaattaat tctggcacca tattttacaa agaacttga 180
caaattggag cccatccaga ggagaacaaa caatcttggt aagggtctgg aaaccacaac 240
ttgtaaggaa tgatggaaag agctgaggat gtttacctg gaagagacac attttaagag 300
gaacatgata gcttttttaa aaacactgaa aagaactgtc tgggtggaaga gagatttgat 360
ttattcaatg ttactctgga gtatacattt aaagccaaag agtaaaagtt aaactctaaa 420
ttctctatga tctaataacc aaactttccc aaaccaac 458

<210> 871
<211> 450
<212> DNA
<213> Homo sapiens

<400> 871
ccttgagaca agaactcaac ctggtaata ccttgatgtc ctgaggctta tgatctctg 60
agaagaaaat ccagccacac caggacaggc ctctgacca cacaactgtg agctcatgaa 120
tgggtgttgt ttacagct cagtcagtgc tgtttgtta cagagcaaca ggaaacgaat 180
acccctcca cgcagatctt ttctagagc aattaattat gcatacggaa cggatgaaat 240
gtgctaaggg accagtgaag aagctgacgg tgcctcagg atgaaataga gagggaaaga 300
aatgctattc attccacaaa cattccacc cccanggaag gccctcctc ctgcatntag 360
ccacgattca aggaaagggtg aactcacagg aaaaggagac taaagttctg atagaggaac 420
tttaccata ggctaccage cattctttcc 450

<210> 872
<211> 426

<212> DNA
<213> Homo sapiens

<400> 872

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aaacctgaga ggaagcagaa catgaaagca agaaatctga gagcaaatgc agcctttaga    60
tgagcttgaa cacagaagag aggcgatcag aggagaagat caaaggctgg ggaaggaggc    120
tcacaaggac tccccacacc agctgacagt ctgtgcagag caggcctgtg ctctctccct    180
cagaaggcag ggctctagca gaattattgg aataaggcat ttctctctta atacagaaga    240
atgaacagtg tcatgtgtgt tggttaattg taattgctag attgataaat aaatagggca    300
tccaaattca ttctttaat tcttacccta attttgcac ctccattta taaaatattt    360
taatcatgtt ttatatctaa gcttatatgt tttgatatt actatcaaaa aataatttaa    420
ttagcc                                         426
```

<210> 873
<211> 321
<212> DNA
<213> Homo sapiens

<400> 873

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ggctcactc ttgtcaccca ggctggagtg cagtggcgca acctcagctc actgcagcct    60
tgacttccca ggctcagaca cagactcaga aacttgagac aacgttgccc aagatcattc    120
cacactgaga aaaaaacaca ttagaggcag cagtgttttg aatagggtgca tggctagtgt    180
taaataatgg aaagaaattg gaacaagagg caagttgtga agtaaaagtc acaccctggt    240
atgaaaacct gttgtcactg tagcgaaact tgctaattac agaccggctc catcagtagc    300
ttcacaatgc acaaaatcac c                                         321
```

<210> 874
<211> 371
<212> DNA
<213> Homo sapiens

<400> 874

```
aaattcctct ttccctga agaaagctgc ctactgaag gacactccac ctcccaagg    60
gcagcctaca atggtgtcca tgctgagcac acctcctggt gaacctatgc actcaaatct    120
ctgtccagca cctgcttctt ggggaatcaa ccgaacagat gatgccagga gtagtctgag    180
aaagaagatg ctaagatggg atctgaggct gccagctgac cactgacagg caatgagatc    240
cccgttaccg ttggtacacc gagctgataa agcccctgac acaagatggt gatgaaactg    300
gcaaaaactc caatgggggt taaaatggan gggnttacag ggggaaggaa atngnntttg    360
gggtaaaaat a                                         371
```

<210> 875
<211> 433
<212> DNA
<213> Homo sapiens

<400> 875

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cacctgagca acacagacgg tgtccttgtg agagaaacaa gcagcttgtg ccctcagagc    60
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aggaagacaa agagtaaagc ctttatccca ctgtttggac acacagtgc tccatctcat 120
 tgaagcctag gtgatgact taatcacggt ccaggatcca ccagctatgc aggctcgggc 180
 tagaaaacag attgcttcac accatccaga gctcttcagc agcctcacat tgcagtcagg 240
 ctgcaactgg acagatggca tgcagggctc agatgtggca cagtggggaa gcatctgggt 300
 cccactcagg atacaacatt gaaaacatca gccacgccct gctggatgag ccagggtctg 360
 atgaacgggg acttgctcag cctacaggtg tccccagcc atcttttct caccagcaca 420
 aaagcttcac tcg 433

<210> 876
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 876
 gtctgtggtc tcgggggctt acatgaatga agcttcgcag accttcgcga ttggccttct 60
 tctctttctc tacaggcagc aaagaatatg ccatctacag ccttgcttag caacctcagg 120
 agaaaggag ctctctttc tctagagtc atagtgaat ccagagaag cggtgattag 180
 ctgtgctagg gctccatgcc catccctgta tccagaggga catgttctac aacttcgtgc 240
 aaattaaaa caacacattt ttgaggagga cagtagagta tgctgggcaa actaaataaa 300
 taaaaataaa taaaccaaag tccactgc 328

<210> 877
 <211> 404
 <212> DNA
 <213> Homo sapiens

<400> 877
 acaccaacca aatgctgtct ttgaatgtac ctactgacat tctcaccaga aatatagaaa 60
 tcatctgttt tcccacaacc actccaaaaa gactctacac atactggatt taccactgtt 120
 cagggaaaaa gcaagatcat ctacagcatg ggagcaagac ctgtgatgcc atctcttgg 180
 accatctcat ttttagttt acttttcgcc attttatag agaaaacctg agttggctag 240
 tggcagaatg gttggagctg ataactgcaa agagtacatg tgaaatgcta atatccatgc 300
 ctctgaaaca ggatcattac acagagggtt gggaactcc agttattaag tatatgtaac 360
 tccattctct taataatgat attttaata aactctttt tctg 404

<210> 878
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 878
 gtggatgatc aagagccctc atctggaatt agacctatct tgcttgttca gatccctgaa 60
 ggagaaaaga actgctggtg tccaacctc aacgcagcaa gttatttta tgtgttttac 120
 atgatgtctt gatccaaaag ctggtttttt aacaacaaga ttcacaagac gaaaaaatat 180
 tttaaaaata tggattgact gcttgagaa aatttaaaat cttttgagca gcactgactt 240
 tgaagtggaa ggatataagc agtgggagct gaagttatc agatacacag agcaaggcct 300
 tcggacgaga gctttgatga gtctgaagc aactgaagtc atgaatacgc ataagctata 360

acttacaagg caagctattt gggacagaag ataaggcatc cacttcttag gaaaaatgag 420
ctacgcgctc tacggtgtct ggggtcacat 450

<210> 879
<211> 458
<212> DNA
<213> Homo sapiens

<400> 879

ctatcctact ttggagaaga cgctggaaat tcagagtttc tgccagagaa tatatgcctg 60
aactaaaaga ggaagtggcc tataggagaa aatgaaatat gattgtccct tcagtgggac 120
atcatttgtg gtcttctc tccttttggat ctgtgcaatg gctggagatg tagtctacgc 180
tgacatcaaa actgttcgga ctccccgtt agaactcgcg ttccacttc agagatctgt 240
ttcttcaac ttcttactg tccataaatc atgtcctgcc aaagactgga aggtgcataa 300
gggaaaatgt tactggattg ctgaaactaa gaaatcttgg aacaaaagtc aaaatgactg 360
ggccataaac aattcatac tcattgngat tcaagacatt actgctatgg tgagatttaa 420
catttagagg tgacagcatc cccacactg gcagtgtc 458

<210> 880
<211> 274
<212> DNA
<213> Homo sapiens

<400> 880

aatgacccca cctggactcc tgcctcaaga cttaacatcc tgtggcccta tgcagaggca 60
gactcatcac accaggactg tttttcacac tccaatcatt tttttccct gaccaatcaa 120
cattcccat tccttagtcc cccaccatc aaactatcct tgaaaacct aaactccaag 180
cctttgggga aatacatcaa ttgaataat aactctgtct catgcatggc atggccagcc 240
tctgtcaat taaactcttc cttactgca atgt 274

<210> 881
<211> 265
<212> DNA
<213> Homo sapiens

<400> 881

ataaatatgt actcaaagca ggtggctcaa tccacttacc agcatttggc ataccagggt 60
tcaatgggta atcacaaga agaacggggc agagctagag aacagagaga acgcttttg 120
tgactcaagt gtgcagaagg taatcaactc ttctaagga tcagatgatg ccacttggcc 180
ctacaatgtg atatctttag ttcttacctc tcagtaaaac ttttaagac tcagcctcat 240
ataatagaat gttactcaac atttg 265

<210> 882
<211> 278
<212> DNA
<213> Homo sapiens

<400> 882

tctctgcacc ctacaatata ccaactggca gttccatcat ttgaaagaaa atcttcaagg 60
taaagacatt tacaatgaca caaaaacctt tcaaaggcat catggtccta aagggtttc 120
cccaagggaac agcacagtgt gttccaggcc ctgacaagag gtttaagacc tgtgacacag 180
actgaagctc tcttggcata ctctgaagct ctctggcac cctccccttt atgcttcaca 240
ggtgtttctc ctaataaatt tctgtatgt ctcatccc 278

<210> 883

<211> 312

<212> DNA

<213> Homo sapiens

<400> 883

gttttccga ggatgactct ggctgccctg acagccccac cacaggggac agcagcatt 60
atttgacttg actaggattg gaacttcag tgatctacaa tctccatag atctctgtt 120
ctacaaggaa gcaccttctc catgaatatt atgcacttag ttaactgag ccatggaaag 180
ccaatcattc attcaacaaa tatgtacaga gtgtcaataa tgtaccaggc aagaacaag 240
gagctgcgct ctttcttcaa ggaatccata gtctatcag tagaaggaat aaaatattct 300
aagtgtctt gt 312

<210> 884

<211> 123

<212> DNA

<213> Homo sapiens

<400> 884

ctgtatcaaa tctggattgc aagctggcct tctgattgaa gacgtcagga atgacacaca 60
acagcctacc atctcattt ccaactgtct gctgaccagc ctaataaat aactttaatt 120
ttg 123

<210> 885

<211> 450

<212> DNA

<213> Homo sapiens

<400> 885

ctcaaaatca cctgtgatat ctgcagctgg ctttgcagag cttgtagatt tgggctgttg 60
accaagacag aagggaatc agggatcgtg tctgcagccg aagaaagaag atgcaggcga 120
tagaggaggt ggagaaggag tagctgcccc ctcttctcta cctgatcatc agaggggaag 180
aagccaagac tcaaggagt aagaacttt ccaagggtag ctattagcca ggactcaaac 240
ctacatactt gaatgaattt ctacaacctg ttattgaaga ctaaggaggc ttctcagcct 300
gggctggatc ctggacagac aggccaggc aggctgtgca ctgtgacctg gggccttgct 360
tgtgaacaaa gaggactca agaggagatg gcctggagga gttcgccttt gtggtcattt 420
tgcttcagtc cgtgacaacc tggtctctgc 450

<210> 886

<211> 478

<212> DNA

<213> Homo sapiens

<400> 886

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agcgtaagat ctcaaggac tgtgtgtgt tcatcttgg actgtgtgac caccacacc 60
ccatgctgaa cactgtacct ggcttagtaa gtttgctaa attcatggat gaatgaatga 120
aatgtgaaga agctccggat gatgccaagt tgcaaggga agccaagaac tgagggaac 180
tttgggagg catgaaatgg aagacaaaa aagccactct gcctccatgt actcttcgaa 240
cttccaana ataccatgct ctcttgagg actttgcnc caanacaggt nttctttan 300
anngggcncg ggggccaatc ctggnaatt tcttgggcct tggggttgna aaaaagnct 360
nccttgggaa gccggcccca aaaaancctc cggttgggga angggaaatn cccttttnc 420
caaaggggtg ggccgggaen ccttccctt nggggggaat tttttccc taaaacce 478
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<210> 887

<211> 616

<212> DNA

<213> Homo sapiens

<400> 887

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tccttctct ctgaagccag gatgaaataa cggtgcgatg taatacaaca aaccatatac 60
ttccaagttg aatgacagt aaaatggtgt gatcttggt cactgcagcc ttcacctct 120
ggactcaagc aatctctca cctcaggctc ctgacacacc agttgcacat tcaggtgaaa 180
attcaggaag aaaagaagcc gtctacatcg cggtggatgc cttggcttat gaaaactttg 240
tgggttcttg gtctcgctga ctcaagaat gaagccgtgg acctcacgg ctggctgaga 300
ttttatatac acaaccacag ctgtagaccg ggatatttac tgcagtgccg tctgagatgt 360
taaaagaata taccaagccc tattaattat tcagaatata ggagtgatgt ccttctctc 420
aaagcacata tagttcacat cccaggett aaattattat tattgctatg ntggagctgg 480
gtttaaaagt tcgtgaggag tgattggtaa aattcanga attngcaag ncagttggta 540
acacaacct tatgtaatta tagaaactta caattaaata aattatgta aaaaccaang 600
cataaatctc taactc 616
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<210> 888

<211> 427

<212> DNA

<213> Homo sapiens

<400> 888

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gcttgaacce agtctgacc cctcccaag aacttctgt tcttgctcc agaggattgg 60
aactgttcca ggggtagcac ttagagagca ggacatgcc ataagctga ggaaggtact 120
gcttacaaga aatgagtcac agcaactcca ttgcttcaa caacaaagt gatgaaaaac 180
actcaagccc cactaaacaa tactcggagt ttgctgcga cagactggtt agactatttg 240
gacactacca tgaagactat atccaccatt ctgcctcaa aggaggagac tgcagagaga 300
aaaggggaag aggaacagga ggaaaaagg ggaggggagg aagtggagga ggggaanaan 360
gncntntnnn angaaganat ntnntttat tgccatanaa atgacngnnn gaatccatt 420
tttctg 427
```

<210> 889

<211> 572
<212> DNA
<213> Homo sapiens

<400> 889

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atttaccgtg aagatgctga catgtgttag aaacagaaaa tccagctcat gtggtttaga 60
cggagacgtc tctcatagca ggaaattcca ggtgagggca gcaggatttt ggtgaattgc 120
ctggttgctc caccaaggac tctgtctctt ctcatcttcc caggcggcca ccccagggtg 180
aagatgctct tccggccacc ttctcttata agtgcaaagg gctgcggagc accaggcatt 240
gcatccagac agggaatgca acattcacca gggaaaaagg agcatttctt ctttatgttc 300
ctgtaggagt gagaaaacct ttgccagaca acccccagca ggcttctgtg tgggactcat 360
tgacttgagc ttgttgaag ccaattgttg gaaagagaaa tggagtacc aagattttct 420
caagagacag agtttacct tagccacaca aagtggatac ctgaaccagc aaggatagag 480
agggcattgg tgctgcattg tcaaccaaca gtattcaca cagaatgaaa aacaattcac 540
atttactact gaataaagca gacactcctg ac 572
```

<210> 890
<211> 622
<212> DNA
<213> Homo sapiens

<400> 890

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acaaagacag tcacagagtt aacatgtttt ctgagggtcat accactaaaa gtggaaaaac 60
gattatttga acccaggcac tctggcacat gctttatgag attcatttct ttgcaccctc 120
agttaaggaa agacactacc attcaaatac acaagctaca taagacagac tacgtataca 180
ctggaatcag agtctccaat cagaaaggga tttgtgtct ctttctctgt taagaacctg 240
gtttagacag ctctgtctacc tataaacatt tgctctaate aattagagaa ggagagccta 300
agaaatggtc atgcaaaata ttcggacaat gtcacatgat gcctgaagac tgctctcatt 360
ttaactggga taaagaggac atttctccat tcaagagctg cttctgattg ntctatgttt 420
ctgatgcatt ttactgacg caatacatag ggtaataaga tactcatgtt acagacacat 480
tatgtaataa gtctgnatcg gttatacctt tatttggttt cangaaaatc aaggtttatt 540
tttactctcg ngaacaatg ncatttcaac ttatttatac atattccttt atcaaggaaa 600
taattttatc ctggatatcc cc 622
```

<210> 891
<211> 235
<212> DNA
<213> Homo sapiens

<400> 891

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gcctccctt aaaatgtcat ctggaggaa tggatggcc tgaacccag cccgagtcgt 60
cttcacagc gccatcctgc ttgtcttct tccagcacg taccttgga atgatccgat 120
tttctactaa ctgtctggc ccccttgaat ggtggccca gagagacaag gcctcctca 180
cagcggatgc tcagaattta actaatgat ttaacganta aatttaggta aaact 235
```

<210> 892
<211> 231

<212> DNA

<213> Homo sapiens

<400> 892

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caagactgcc ttctggccc tcgttccttc ttctgtctg ggactctagt gaacatcatc   60
tacgaaaggt tctgatcaga aaaggcattt tcagagctga cactggctgt tgaaagaaaa  120
gaataaaaag cttgagactt tcagcatcct ggagaaagaa tatgcttcat ctacgcacct  180
cacacatatt tgacttgaaa tcagattaat aatatataa cttccacaag c          231
```

<210> 893

<211> 213

<212> DNA

<213> Homo sapiens

<400> 893

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atccagtaaa gactgcgcgt ctgacacctt taaaagtctc aaaaggaaac atttaccatc   60
tgtttttct gagggagggt tcatttatat aacaagaaga ccacctttgc tagccaagcc  120
acctttttc ccccttccca caaactgttt taccagaatc caagccccca ttctttctgt  180
aacctctaaa tggtatataa atttctgtaa ctc          213
```

<210> 894

<211> 138

<212> DNA

<213> Homo sapiens

<400> 894

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gacgttctct gcaggcgaat agtttctgca ttacaggatc ttctgcaaag gcccatcaac   60
tcgtcaatgg acagacccaa cagtttgcac tctaaaattt ttgaatgcc tctcattaaa  120
atcctcctct tgctgctt          138
```

<210> 895

<211> 219

<212> DNA

<213> Homo sapiens

<400> 895

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gtttatgcta caagttactc cagttctaaa ctgaatggaa aatggaacca ggtgatgtat   60
ccatgtgaaa agagaccac cactggggat gactgagcta gtgaaacgct gctgcagaat  120
gaggtacggc tgagacagcg gtgaaccatg gacaggaggg aggtacacgt gaatagacgt  180
ttatgtgttt tatgtaaaa taaaatgtat aatgattgc          219
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<210> 896

<211> 453

<212> DNA

<213> Homo sapiens

<400> 896

ttctcttgta gctagtatgc caaaactttt aagagacccat gtgcaaccct ccagagccct 60
 attgttggc tacaaggacc tggaagccac atgtggagat ggtggaatca caggctaaag 120
 agtagcttc attggaagtc acctttgaaa acagaacgtc acttttgtt agcactgcaa 180
 tactcttcac cactctccac ttgggttctc cctgttttgc aactgttaag aaaatgaatt 240
 aaccaattaa ttagccccct gtggctgagt tcttaaactc tagaaggggt acagagagat 300
 cctacctacc ctatggatgg cagaaatggc agctgacatg agtttcaact cctcatttat 360
 aaaatagagg atactaacag gcccatcttc aaaggctgtt gtaaagatta aatgagttaa 420
 tatatgcaaa taaactggaa cagtgcccat gac 453

<210> 897

<211> 184

<212> DNA

<213> Homo sapiens

<400> 897

ggttgccgga gcctacgaag gagaggggct gaggcctata aaaacttggg cacataatct 60
 gtctaatac tttgaagatg aaaagtgtgt gtgaaatgcc aaccgagctg atgggaccag 120
 ggctggagca gagatgaaga gacacagcag ggccaattgt gcaaaaataa aatgcatatt 180
 ttt 184

<210> 898

<211> 90

<212> DNA

<213> Homo sapiens

<400> 898

caaaactcca gtctgtcatc acctctgaca tgcgccaaga gctaccagga atgatgaagt 60
 atatttcaaa taaactttcc tattaagag 90

<210> 899

<211> 452

<212> DNA

<213> Homo sapiens

<400> 899

agaccacgt attgaggac tgaagtttca gcagcacatg ggtgacctc gaaatggatc 60
 ctccatcacc ttcatgatgac tgcagccctg gatcacaact tcaccacaac cttgagagt 120
 accctacct tgaacctccc agccaagctg ttctcagaag gccagctaac ttcaaaaatt 180
 acccaaggat tcatcatatc aaggggcaaa tggttctctg tttctctctg tctctctca 240
 gggcattagt gtctggccct ctctcaaggt acctgaatgc tgggagcctg aatctgacaa 300
 tgccatttgc acctcacaaa tcagcttgag acaatgctta catatgttcc cctgcttca 360
 tatgtctcgg ttatacttga gtgacgtca tatacttta ccccatittg tatctctcag 420
 ttatactga ataacgtca tatactttc cc 452

<210> 900

<211> 636

<212> DNA

<213> Homo sapiens

<400> 900

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gaatggaac tagggctcag aggtttcact tgccagaagt cactcgggcc ctgggaagga    60
tgcaaacag ctcacctggc tctccagcac atgcaccca gaccacccc aaggatgtga    120
cccattcctt ctgtggagtc tgatctcca aacttagac aacagctcct tctgcaagct    180
ttcgagcctg caagctaagg acatgaatga actgagtcac cccacagag cttcattaat    240
ttaaggcaa ttaagattt ctgagtcata ggtttcagtc atttagattt tcccagctgg    300
tactgtactt gcccacacac acttttctt aaagattgca tctgtctaga tgtgtggttc    360
tgcccacctt tctcagttt ctgagaagaa actcgccctc gtggagtgc acatgcaggg    420
ctaagccatt tccatttgc acgtgcatta gactcttgc ctgagggatt aatgggatta    480
gcagctgca gcttgatcta gactctatcc accagagaca tgcacaattc caaattctat    540
atccaacaca atattttacc cagtcttccc agaaaattca gttatgcat atgngnactc    600
cactcctgaa taatatttaa gcaacttgat gaacaa                                636
```

<210> 901

<211> 477

<212> DNA

<213> Homo sapiens

<400> 901

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agcagtagga ctcaacgctg aaagagaaga ggcgggaagc taagaacaca aagagaagcc    60
atgcagggat tcacaaaaac agcaggcagc cagtgttgct gatggaatgt tggaggaagc    120
tgtctgttc agcaatacag gaaaaatgac tgcagtgaaa gaaaatggaa caagtgcata    180
cattgacaag aaagatatgg attcctatac acaaagactt ccccttgcca gatggcaggg    240
gtggcatttg cagatgatgg gcagaggggc tggccctccc acattaggtc agattggcta    300
acagtcattc cctggcagga aggttcccaa ccctgggtgc attgcacat catccgtgaa    360
agatcattt attttaaatt cagattcttg gttacacct agccctacat aattaggatc    420
tctggggatt atactctgcc atttcacaaa tattaaatgc cattatgctg ccttttg     477
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<210> 902

<211> 294

<212> DNA

<213> Homo sapiens

<400> 902

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aagacaatgg gatggatatt tggatcagag tatgagttgt ggatgaagag ggaaaatttc    60
tctactggc actgtgatga ctagtcaaaa cctacgctat ctacaatgcc ttcctgtct    120
tgcggctcat tctttctgaa gccagaacac ttagagtggg tggggatagt agggagaacc    180
accatgctgc aatagcaaac cagctccaga gaagggtctt caaggggtgc taataatact    240
ttctgacaat gaatcttcac tgtgggggata taaattatat gcatcctaaa ctg         294
```

<210> 903

<211> 433

<212> DNA

<213> Homo sapiens

<400> 903

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gacattccta cattgattgt caaggtgttg aaatttcac catgtagttt ttctccaca    60
ctcacagaga ggctcacggt aaacctccta gagcatctta ttaaagaga aacgctacag   120
ccatagtac agatgagctc tggtagtaaa aatccacac accactactt gactgttgcg    180
gtccctgaag cctacaaaat cgcagaatga ttgctgggtc tcaaacctct aggttacttt   240
atgattggga attttacata tatccattgc ctgaaatgcc ctagcatct attacccttt    300
gagacttagc ttcaatatca agtaatgaag cttttcttaa gtacctagag aaaatcagtt   360
ttcgggtctc tcattgctacc ttgtacgca cagctttctg ttgttacctt ttcaaatcaa   420
tcatttcacc att                                                    433
```

<210> 904

<211> 437

<212> DNA

<213> Homo sapiens

<400> 904

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gtctcagctg tgatgtcctt cggaggctgg ctctgttgg cttcaatgc aattttctc    60
ctgtcttggg ctgtggcccc caaagggtcg tgccaagga gaagcagtg tccaatgcca   120
ggggtgcagg cagtggcagc tactgcatg attgtgggtc tgctgattt cccaatcggc    180
ctgcctccc cattcatcaa ggaagtgtgc gaagcctcct ccatgtatta tggtaggaag   240
tgccggtcgg gttgggggta catgactgct atcctcaatg cagtctggc cagcctcctg   300
cccatcatca gctggcccca cacaaccaag gtccaaggga ggaccatcat ctctccagt   360
gccaccgaga gaatcatctt tgtgccagaa atgaacaaat aaaaatctcc tgggagtagc   420
acaaagggca caagtgga                                                    437
```

<210> 905

<211> 237

<212> DNA

<213> Homo sapiens

<400> 905

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caagcaagaa gatattctgag aagcctgaga cccatgccac agttccccc aaggagcaag    60
ggaatgctgg aagtactga aggagaggaa agcatgtaga atccctggat ccaaggcaaa   120
ggaagaaagc actagaattc aacttgggtc tgcaaaaatg aaccacagga agacctagac   180
aggctttggc atcgtatca tgtaacctt tgctactcat aaacaacaat tcacaag      237
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<210> 906

<211> 633

<212> DNA

<213> Homo sapiens

<400> 906

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gcacactgga ccttccgga aagatcgag gaagcgagtc agagccgagt cttttcgtt    60
ggagcttaca ttctaggcaa ataaggtcat ttccgccagt gatcagttt catgacaaag   120
aacatacaac tgtgatcgag tggactgaca gaaggaccag ggaaatgggg ctgctctttg   180
ggatgcgaat ggtgacatct tcaggagaca acatctgggtc tgagactga ttgaaaagaa   240
agtgtcaac ttctgaaggt ctgggggaag agaggctagg cggaaatcag ggcttgtgca   300
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aaggcccaaa ggcagcaaga gctcctgtga tcaagaaaca gagagaaggc cagtgtggcc 360
 ggggcatgtg gaggcgtggc tgagcctgc aggcaacagc gagccagaag tcgggctttt 420
 attctgagtg cagtgggaagc cccttggggg ttctcagcag gacaggcagt ggcatgaaag 480
 cagaactgag agagctgggg ttacctccac tgggtttatt ctcttccac attctctgga 540
 agacactcca ctttctttct taaaactgn aatnccctt ggttgacttt aataaccanc 600
 caagaacatt ttctcagctg gttaaatttt ttt 633

<210> 907

<211> 647

<212> DNA

<213> Homo sapiens

<400> 907

attatatctt ggccaagcac agagattccc tgaagggtcc gctcaagaag caggaggtgg 60
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 tggagacgcg gcccatgacc ctggaggaga tggagggaagt gggcaagcgg taccgcgagc 180
 ggcagcgaca gcacaagctc acgatccctt ccatccagta cacggagcaa tgtcacctgg 240
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 tgaggagct cattgactcg gccgcaggc acaactttct ggtctacctg caatgctgga 360
 agctctgtaa gtctatggc ctcccgctga cagaggacat cctcatgaaa gccttgctgt 420
 acccaggaga cgagatcatt ttccagatgg acaaagtgtg ccccatccgg cagccgggag 480
 gtactactc tgactggaag gtctttctc cgaatctggc tcttgctccg gtcccanggc 540
 ccctggaaaa cgcccaaaga aaagcaagaa aatgcgcttt taaggagtgt aggaatttac 600
 cangaagctt gaanggggga anggncccag ggcttgaagc aaacaca 647

<210> 908

<211> 298

<212> DNA

<213> Homo sapiens

<400> 908

attattgaca agcaccgtgg gctcaatggt gtcaagtgt acttggtgt tcaacacccc 60
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 tgcccgtctg agtgatggag agatgagtat cagtctatac ctcaactgct tcaagcccgc 180
 ctgggcttcc tccctggcgc cttgtctgt gtcagggttg gagcaacgaa actgaaagat 240
 ctccagagtt tgaaaacaga gtgaaagagc aaatttaata aatgagagct cagcctcg 298

<210> 909

<211> 197

<212> DNA

<213> Homo sapiens

<400> 909

gntggctgga aatattcana atgagagccc acaattcanc tctcagtccc gagggacttc 60
 cttgnctgat gtactgtnga gcagcagnac tatctgttc tgctanaact atcaaaagta 120
 tatgaaaatc tctttgaaa actcagaatg taagaaacat cactgaaatc ttcaattata 180
 aatcttttgg gaagctg 197

<210> 910
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 910

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atgggacctt cacaatatat tcattgttca gctggaaacc ctgggaagca gtaatctgag   60
ctccttgtec tgaggccact tggaggccat ctccatccaa tgtgtgtgt ggacccaac   120
agagggctga gcagctgtcc gtccttgact ctgggagaaa ggcgttatca tcaagatttc   180
cataagtgga cagaagacac actgaccatg aaaggaaggc cagcactggg tgatcattt   240
cattctaaat ggaatctcat caaataagca aagaagatta agcgagaga aaagacaatg   300
ctgtcaccat gcccatgcc aacacttttc atctattctt ctgagactag ctctgagaag   360
ttacctggga gattttacct atgtaagaag acaacctttg ctactgngg agttctgtcc   420
ctcacttttc tgcaatttgg tggaacatcc ttcagagatc aaaaaaactt tgttctaaga   480
cattggctgg tcttgggact cattcaatct cctgaaagn cacttactac cccttaaaat   540
tacctacatt tctcatttct ctcttccta tgaaaaagt atttaagctt caaccccctt   600
gcccttntt tgagtttcat attttgatg ggtccggaaa cactt   645
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<210> 911
 <211> 639
 <212> DNA
 <213> Homo sapiens

<400> 911

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atggcactgg ctgaggcaga atgaatacag ctgctgattc tgatctcaca ctgggtatat   60
ccctgagtgc tggaaaaaac atcacctca gaagtgtgca ttcagccagc tgcctttgga   120
gagagccggg aagggtgcaa agtggcatgt cctttaccag tcaactcttc tgggccaatg   180
cttatccaga aatgagacag aactatgggt ttactgcaaa tgaccagcat ccgcaaagtg   240
atcaagacta ccaactttgg tgttactct gcaatgaaaa aatgaaccag cagaaggtgg   300
atgtgaaaga ctaagaagag ccctgcagaa aaccggttag cccatgtttt catctgtaat   360
gtggatgtgg gatgggaaga gggacaacga catagtaccg accaggttcc agaaactatt   420
ccaagtgtt tacgtgataa aaatctctta attgtctcaa cgaccatacg aagtatatcc   480
ctagtgtgct ccctatttta tagatgacaa aaccttactg atatctgtgt aactagtaaa   540
gtaggagaga caggattcaa tctgtcagcc cactntgcc ggtggccgng tccctgttt   600
tgggatcctg acaggcagnc cccanccagg aaccccgtc   639
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<210> 912
 <211> 629
 <212> DNA
 <213> Homo sapiens

<400> 912

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gtctttaga aatttgctg atgcaccccc tagatgtggt gaaaaccagg ttcagattc   60
agagatgtgc aaccgatcca aacagttata aaagcttggt agacagcttt cgaatgatt   120
tccaaatgga aggaaccaca gcatgtgggt aagaaacttg gatctgacag cagaagaaga   180
aagaggatat tgtatgcctt caatcagctt tgtattagga gagccttaaa ggaaaaattt   240
tgtgaaaaaa gaaagaggaa gaaaacaaca aactagcaag atctgtattt cagtataatt   300
```

tggagaaaat gactgatttg ggttggcat gttgccagaa cagatgactc aaggcttcca 360
tacaagaaat ggaaatcagg aggatgcctg aagcctgaaa gaagaacaaa ttgtaaagat 420
atgattgact gtaaggcttc aaaatcaact gtaccaaaga tgagcttgaa tcattgccca 480
gaacagagct gaatggggat gtccattgg gttctggctg ntgaacaaa ataaaatgta 540
gtaattgnaa aaaaaagaaa aaaaaaggc cagcgaggcc aattcanctt ggcttaacca 600
ggctgacttg ctcaaaaggg gggggggggg 629

<210> 913

<211> 644

<212> DNA

<213> Homo sapiens

<400> 913

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agacaccag tgagctctaa gtgcctctga gaaggtagag ttgaagaggg agcaaacaaa 120
attaagagat caaccctgca atccagaaac tcagctgatg gccagtgtta catagagcca 180
agatttaagt gccacttgc tctcttcca gtaacaaga cagataacca actcatgagt 240
tgctccattt tgcatttcta ccagcaatgt gactactctc ccctaccttc atcaacacaa 300
gccatgcagc caccgcagca ggtgatgcct ggattctgct gcattccaggc tgcagatgcc 360
tgatacctga caccctcgga actgacgtct gactgagag cacatctccc aactgcagag 420
cccaggtgat ggtgctgctg ccagcagaag tgctgatggg ccaagctcct acaaagcttt 480
cttggtcttc tggagccttc agtgtgtga agccacacca aagcagaang cgcttttcta 540
ttagtggaat agtatggtaa ttggacacca aagctatacc ataaaatcat caacactgna 600
taattggtgc tattgaaaat gcttatgggt cattattaaa catg 644

<210> 914

<211> 634

<212> DNA

<213> Homo sapiens

<400> 914

atgggcacca tgtgatgaa ttggtggtg gaaacgctgt ttgggaggaa acagccccag 60
cccaaagccg gcaatcctat gtatctcctt tcttgctggc ctatcatagg acaggtgtgt 120
ttcttacaga tacaacaaag cttaaagca cgaaaaagat gaactcgaac caccagtgc 180
tggaggaacc atgacaacac aaacaagaag gaaacaagaa agaaaaagca taatcctggt 240
ttttgtgttc tgaattgtgg atttgaaatg gaggctcccc tgctgctga cagcctgcct 300
tgatgctgct gatgtctggg tgaatgaacg tcatggggtt cctccacct gcctctgtgg 360
attaatgaag agcaaggcag gaatggcaga cctgccatct ggaatgacct tacctgataa 420
gattgttctg cctccccgc caaagggtgag gagggcttc aggatgcagg agactgtttt 480
ccccacacct taatgagaaa aattgacctg ttattcacc agctgncttc ttgtttcta 540
atccaagcaa ttgctgcaaa atcgnnttca ctctttcat ggtgaaattt gagcagaaag 600
ccccctcgag tggcttatct ttgcagacaa ccaa 634

<210> 915

<211> 553

<212> DNA

<213> Homo sapiens

<400> 915

gacaagcgcg accaccaca catgacggta ctgtgagggg ccagtagtac gaatgaatcc 60
caactgggcg gccctgcttc cctgcctcaa cccagggctg tgtgcttccc agcaggcact 120
gccatctatc cagccccaca gtttcccagc actcagcact tctgatgctt ggcctcaacc 180
tcgccaccac tggagaagat gaaggtgcat tctggtggct tccacaggta tgacactgtt 240
tcttgggacc tgaagagaat gcaactgtca caacctgagc tacaacctg cagccacatg 300
ctgaataaag tgcttcaact cacagctcaa aagcccatgg ccagagtgtc ctggggactc 360
ctgtacaat tttgtttt cactcacaag tacaattaag gaaataatct ttgggttta 420
agtgtaaata ctaaaatctg ccctgataag gtccttcccc ttgcatgcaa tctattata 480
ttctgttagc aggcaaggaa ctctctatgg ntaatctgct tgatttgggg gggagagtgt 540
aatctttaa aag 553

<210> 916

<211> 167

<212> DNA

<213> Homo sapiens

<400> 916

gaaatggtac ttttgatca catgtgaagg tttaaaaaaa tacagctgcc ctggcttct 60
gaaatctgga aagctttaca gcatgaaaga agaatggtt cattggataa taatccatct 120
gcaataagag caaagtccat actactatta aatgtgtta tccactg 167

<210> 917

<211> 184

<212> DNA

<213> Homo sapiens

<400> 917

ttacaccacg cctctgagt atgacagcaa cctccttca gggattaaag aaaatgcttc 60
agaagattgg aacactgtc agccttccca accttcttt accactgatg ttctacctt 120
agtgatctc ctcttatt taatgcttct ttcttttac aattaaaagt tcataaaatc 180
ttc 184

<210> 918

<211> 441

<212> DNA

<213> Homo sapiens

<400> 918

taccctggaa gtgetcagta catcatatga accagagtgc tggccaggaa tgagaccacg 60
ctttgectgt tggtcaccgc atctccaggg aactcagagg catctccagg aaacacctga 120
atatgtgagc tggttcctta caacagtcca atgaagcana ggngtgagca gatcctttt 180
acagctaang aaactgaggc acaaaaggt tgacagcaca ctgccccaa agcgagatc 240
tgaaatccag gcagcgctca ctccacttgg catctgtctc agtggctcaa aggtgggtc 300
tggagtcatc tgaaggcct ttcaactnt tgtgtctggg anggcaattg gcccttgcca 360
gctnggactt ttccacgtgg ctccatgggt gcctcacaac atggncctgg gtcccaagaa 420
gacgagatag aacatttta g 441

<210> 919
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 919
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 catgtagcaa ggacataagg gtggctgggtg gccagacag aaaggagctg aggtctcgg 120
 cccaacagcc tgaagaagaac tgaagtaca cccacaatga catgactttg gaagcagatc 180
 cctgagtctt cagatgagac ctgagaactg gccaacacct tgattgaagc cctaatgaga 240
 gaccctgaag tagagggccc tcctaagcca tgcctggatc cgtgactcat aggaactgtg 300
 aggtaataaa tgtgtgctgg ttgct 325

<210> 920
 <211> 508
 <212> DNA
 <213> Homo sapiens

<400> 920
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 ctgggaagat taagcatctg tcatacctac ctcccctca gaggtttggc accaattggt 120
 acaatgaatg agaaaagggg agagatggat atgccgaggt acattcatgg caaatgaaga 180
 ttcaataacc tcacatcagt gagcattaac attgatttca caggggggtg tactcagaaa 240
 ggtgggcagc aatgcagagt catcatgaag tacctagcag taaaactgta ctgcactcaa 300
 agaaccaaca tactgcagc cagtacccca ttgcattaca agcagtact gcatttcagc 360
 aaaataacaa catacatcat attcaattaa gtgtggnaaa ttgtatttt tatttgggtt 420
 actgaattta aatctcatct gcaaaacaat ttaaatggnt nttngaaag gaaggggntt 480
 atataaagtt tatgttgga atcctaaa 508

<210> 921
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 921
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 tggacatcaa ggtcgcagcc agccttcagc aagatctgga ccacaggaag atggccctta 120
 ttggcagcaa gatgcagggg agtccggcca tgctgtgaat gcaaatgaa caatgatttc 180
 ggaacaagtc ctcaatgcta ctcccttggg agacagaggg cctagagcaa ggtttgcaca 240
 ggggcttctg gatgatcact cctcctgccc cctttggatt ggcaggagat tcttatgggt 300
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 cgatatgttc 370

<210> 922
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 922

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ctacagagaa taaacatatg tagtttacga ctatagccac attatatctc ttggaacat   60
cactggccaa gacaatgaag gaatagaaaa gacttacggt atagacaatt aatctagctg  120
aaaacacagt cagtctgagc aagggttctt gctcctaaaa ttagaaaaga actcctggac  180
tgggtgagga ggggtcaaagg cataacgtga gagctaagac gcagggtcat tcttgtagc  240
tgcattgccc ttaactctct agccttatcc ctggagagga gatggcggtt tccccagata  300
agggtttggg atcagagggga aagggtactg tgcctcctgt gccaggcaga gttctgatga  360
ggcagcaaga ttccagaaga gaggactgta tggatcatcc agcaaaccag gccttaacag  420
cgtcattaca ttcccacgc tgcangggaa ggaaatttn acattncna aagggggcca  480
aacntancag agcacctnct aaatttatag aagga                               515
```

<210> 923

<211> 273

<212> DNA

<213> Homo sapiens

<400> 923

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tattctagga cangaagaag caggaagagc aaagaggaaa aatgaaaaga agcaatgcct   60
gtcaagatcc acaacttctc tcagaaatct ccaacagact tctacatatg tctcattgac  120
caaaaatata tcatatgttc atccctagct gctcatggcc ctttgaataa aaccaaggat  180
ctattgacaa agactgggag agtagatatt tgcaatatta gcagtgtcta ccacaccaac  240
ttccagtcac tcaactaagg tctttctgc cat                               273
```

<210> 924

<211> 521

<212> DNA

<213> Homo sapiens

<400> 924

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gggtgcagatc tgcgtagtga aactaccac agcaaggatg tatgcctgtg aggtggcaca   60
gaactgatgg atcagacttg gccttcaacc tctgttatc ctgatgaaat tgcaagctcc  120
aaacaacaga gacacaacat tgaccaacag taagatggct tgaagaaata ttctttcag  180
gacaaactct gtgcattcca tgagggtgga tggatggact tatgaggaca aagccactga  240
catcatgagc aggaacaat gcttctctca agctgcagct tcgaaatgtc aaacagcctc  300
ttccttgggt gacaactgct ttctgactca aaggaagacc ttgcttcca gcatcagggg  360
ctgtcagaaa ctttgctttt gagtaagtac aacatcacac tgcctggagg atctaggtcc  420
acctttacac agaagcacag agctnncnaa gaaaaggggt tnnnggaag ggaaaatttc  480
aaatnggtt ggactttatg gggtntaaa ggacaaaagg a                               521
```

<210> 925

<211> 512

<212> DNA

<213> Homo sapiens

<400> 925

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atacaagtgg atcctctaag aaacttggga gccttgtggg ctggtggaga actctcaaga   60
tggcaccagc ctgtctatgg tctatgtggg aatcaccgcc atccttgcca ttcatgcag  120
```

tgtaccatgt gatgggctgc attacttagt gacaatgcta ccttctcact ccttgcacag 180
aggagagaca gacacctgct tgtccagggt cctgcctgag ctgaggctct gccacaggga 240
tgaagagggt ggagaatgt tctgccaagt gccaacaacg cctcctcaag gacgattcat 300
ggaggctgtt agcctgtgct caattccct tggcaaaact gcaacaaagg catggcagca 360
gtttgatgtt cacagagagg agtgaatata aagcatggct ttaggcagac ttcctttaa 420
catgcacagg ctctgctgn tgncttatgc ctttggngg aatnggaaat tcnaaaggg 480
gnggtntt cctgcctgt acaaagtta tt 512

<210> 926

<211> 440

<212> DNA

<213> Homo sapiens

<400> 926

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gtggagccct gaggcacgt tcaaaaaagg acaaacagcc tgagaggcag ataatggat 120
ggcctgggtt aattttaa ccatgaatg atgtgtctt tctctctcc cctggagaac 180
ctcttccat gtctgactga cgataatgt tgaaatttt ctacttagc agggagaatt 240
agttgtttt agtatccaga acacagcact gtatttggt actagctaag tccaatttt 300
aatatattac catgcataaa catggnggga ggtcaaaaag gccncnctt tgggcaagat 360
tttataaaa taagctgagg ctcaattcat ttttcaaaa acgtggagg cccctgcct 420
tgccaagccc aagatcctt 440

<210> 927

<211> 530

<212> DNA

<213> Homo sapiens

<400> 927

gatacaagca cctgaagac agagattata tcttgaccc ctacagcatt taccacagt 60
ctctggatac taaggtgtct taatggaatg tggatgatgg ggtgtgtgaa gtgattcta 120
cctgcgtgga gacatctcta atggctgcag atgaagtct gcctcctgg ctatttcca 180
ccactgtaga gaattggccac agttcacctg gaattgttt ttctaactg gctagtctca 240
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ttcacaccag tgattgcgtt ggggtgttga ctctctgtc ttaccacta ggtggtttct 360
gtctgcacac aggagagctg aatcgccag aaccncaaa aatcccagcc tcaccaagag 420
atgacacgtg acctggnggg gntcaccca aggcataccc ctttcaagt tagnaaaana 480
aaaaacntg gtcacagggg tttatagttg gttatgggc gtcacaaac 530

<210> 928

<211> 530

<212> DNA

<213> Homo sapiens

<400> 928

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ctcaatcact ctgcaaatga cattacaacc ggaataaatg caaaggcagc aggtctctt 120

aggacataca cctacacaca gtgccaaact catcctgtgg ccaacagatg tacagagaat 180
 cccagagtgc ttattaagg atgggtgact gtcatagtgt ggcatagtgt gtttcctaaa 240
 cctgggaagc tcagcaaacc agttttacaa aaacatcaat agatgatgat ggtggtgatg 300
 atcttgataa cagtgttaat gattatatca gaaactagta cttctgaggg ttacaaggt 360
 ggcaggcact gaggcaacat cttcctatac cttctctcat gtgattcttc caagcatccc 420
 atcagaagct ggccaanggg ggtcatgtct gtnatncac acntttggag gccaaaacaa 480
 aaggatcgnt tgaagtcagg agtttganac cagcctggca acacagaata 530

<210> 929

<211> 518

<212> DNA

<213> Homo sapiens

<400> 929

actggagata tctaagtttt cataagagat catcagaaga aaatgaagat ccaggctctc 60
 tttcagctga gaaaacgcat ccacaaaatt ccaaagaata cctggaagag gaaaagagac 120
 acaaagacag atacacaagg agaccatgat gaggcagaag caagagatca cagtgtatgct 180
 tctatgagcc aagaaaatct aagaactgcc agccatcacc agaagctaaa agagaagcct 240
 gaaacaaaatt ctgcctcaga gcctccagga ggaatcatcc cgggagacat cttgatata 300
 gatttcagc ctccaaaact gtgaggcaac aaataatctg tcattttaag ccaccagttt 360
 gtagtcaact gttccagcag ccctaggaag ctaacacaca gtcagcctcc atttttgat 420
 gnttgaccac acacanggtt gaacctncc gnntncggct tcttcttatt ttgacnnggg 480
 aaagtngata accatgtggn ggggctccct ccttggggg 518

<210> 930

<211> 495

<212> DNA

<213> Homo sapiens

<400> 930

atcgcttctt gacctgcaca actttctgat ttgatgagtt caacagaaac caactcaagg 60
 tagcagatcc agaaatgatt agaacactta ggataatgaa ttattacatt ttcaaggcac 120
 atcagtgaat gttatgaaga gggagaagaa taaagacatt gttgaactta gactttgaca 180
 agatgcatat tggatatcta aatagagata tcaagaaatg aagatatgca ttccagttc 240
 cagagagaaa ttcacactgg aaatataaat ttaggaattt taaagttagt ggtcacattt 300
 aaagctgcag aatacaaaga gatcacctgt gtgagagaac tgagtctga aacatacccg 360
 tgtttaaaga tctgggaggn gcagaggaat ttcaaaggag gctgagaagg ancancngtg 420
 aggnnggtga aaaccagata gcnaaagaaa gcngaatttg gactgacttc cttgnaaaa 480
 attaaaaatg taagg 495

<210> 931

<211> 410

<212> DNA

<213> Homo sapiens

<400> 931

cagactgagg acctggatat ctttgctggt tcctgaaact ctgcagacag tcctaaggga 60

tccagngggt cctctgatgg nccccaatgc tggagtcac ccatatagnt ctgaaaagtt 120
 gtcacanaa atggccgttt ntggaggatg cncaggaaac tttcatttg gcatgaaaaa 180
 ggctnttggg ttgcaaaga ctgacagaag gaagaagttt aaattnttga gccctcaaaa 240
 cagattttta gaaaagtgtc ttccaacctt tgttngtcc aaataaagga agattnngac 300
 ccncnaaaaa aatgtanaan aattaanant aaaaatttng gggggngggg ggggggcctt 360
 tttttgtgn ntntntnccc gngngtttt tttttaag gggggggggc 410

<210> 932
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 932

cctatggaag taattatgga ttaactttgc ctgatatttc caatgaattc tccatagcat 60
 caagcacaaa tgatgatctc taggacagt ggcagcttct gagaatgcac aggaaagtga 120
 ccagggaag aatgattcca tctccaggaa tccctggtga tcttcagagc ccagacagga 180
 cctgctggg ccatggtaac tgagaaactg agaagcagat acagtggtec ctatgttggc 240
 aacctcagct gaagaggaac aactctctct ataatcaagg acttctgaaa ccagaaatta 300
 ccagcgtggg gagagaacat taaaggcaga ggtgtctctt ataagcaca cgtgtgacca 360
 ggtaatactg tctggattag cagctgtaca gcctaactaa gccctggagc tacaattatc 420
 tggtcgcatt aaactgaaat cacctgaaaa acttncactg aacaaaccct ttggaaagtg 480
 ttnaatggen cnttaccccc caaaagggaa 510

<210> 933
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 933

cttcgctggg tggaggana aacttctttn cggntttcc agtgggggat cgaacgggta 60
 tcgaataagc tttgatgaa gcccgccaca tgggantcgg ccccttgaa caaagaatgg 120
 aattgcaccg caaagtctc ccggcccgtt ttgggggtgg agangnctat tccgggctat 180
 gaactgggcc acaacangac aaatcggctt gcttctgatg cccgcccgtt gttcccgggc 240
 ttgtcaacgc aaagggccgc cccgggttct ttttgtcaa agaaccgaa cttgtccc 300
 gttgccctt gaaatggaaa ctgcaagga acgaaggcaa gccgccgggc ttatcngtgg 360
 gcttgccca cngaacgggg gccgtttnct ttgcgccanc ttgtgcctc cgacggttg 420
 tccaacttgg aaagccgggg aaaaggggaa ctgggcctt gnntatttgg ggccgaaann 480
 ngccnngggg gcaaggaatt cttncttggg cattctttaa ccttggctt ncttggncgg 540
 aagaaaaagn aatccaatn caatnggctt gaanggccaa naggcnnggg ggcttggant 600
 aaccctttna nnaccgggtt aaaactcgtg g 631

<210> 934
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 934

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 atattttgta caaatgaaga aactgagtta aagaaagatt aaatgtcctg aacgatacca 120
 ataactaatg actgatgggg tgggtgggttc ttcttattg catgaatcct taaaaacaga 180
 aaattgttcc tgggcgtagt cacagatcga tgtgaagata gaagacagca ccagaatcaa 240
 tgaactctgc aaagatcctg gactcctctt cctgctgcat aataaaggaa gtgaaattct 300
 gcttcacga tgaataacag gattttatat aaaactttga atgacatagg agggacaatt 360
 tgcatagaac aacaagtcct caaactggcc acaagctgtc tgcactgttn tttgaggat 420
 ttccaaaatg ccanaangng cactaacagc tntagatact tgagtcnaca anaaacctnt 480
 gnncttttt ttttaagggt gtt 503

<210> 935
 <211> 155
 <212> DNA
 <213> Homo sapiens

<400> 935
 tggaccagag tgacctceca ccttcaagga ctctgatca ctttaccttg attgtctaca 60
 agggaatgat ttacaaatcc tacactatga ccatcctcaa gaggcctcat taagaaaagc 120
 ttctctgta ttaaatccaa agctgttttc attgt 155

<210> 936
 <211> 535
 <212> DNA
 <213> Homo sapiens

<400> 936
 gttttgtca agcaggaaag gatttgcgtt tggatcact gtgtatggaa caaattgaca 60
 tcccagcagg attcctcctg gtgggggcca agtctcccaa tctgcctgaa cacatcctag 120
 tttgtgctgt ggacaagcga ttctaccag atgatcatgg aaaaaatgca cttttagggt 180
 ttctggaaa ttgtatcggc tgtggagaaa gaggatttcg atatttcacg gaattttcca 240
 accacattaa ctgaagctc accactcagc caaagaagca gaagcactta aagtactacc 300
 tagtcagaag ctcccagggt gtactgtcta aaggacctct tatctgctgg aaagaatgta 360
 gaagccgaca atcctctgct tcttgccact ctattaagcc aagctcttca gtgtcgtcaa 420
 ctgtgacccc agaaaatggg acaactaatg gntacnaatc agganttctn ttaaagggac 480
 ccccncttt gcccnngggn gggnggttaa aaaaacaaat ttgttggggg gggtt 535

<210> 937
 <211> 488
 <212> DNA
 <213> Homo sapiens

<400> 937
 gcttttgggt ttggaccatg agaatggctt acatattcaa aaggttggat ttgggaagca 60
 atgctaagca gtggaatgga catcgacata gagagatcag ctccacactt atactctgcc 120
 actcaacttc cccatgtgac ttgaggatca ctctaactcc aaaacatagc aagctcgcgg 180
 aacatcaggg ttcatgcaaa gtattccaag gagccccttg aagcaacaga atggattgct 240
 cttctatggt ggaatggcac cctggatgat taaaaccgta gcagcaaaca aaacctccat 300

caagtaagaa ttcagagtgt gagatatcac gcacagccac gcgtggatct ttatatacgt 360
gtcaatgtgt ttgattgtat ttttgcttc aaagtatgta ttgagcattt ctctaggtc 420
ctcaagtaac atctttttt aaaaaaataaatgcttaag ggaattgnnt tatattaaac 480
tcgctttc 488

<210> 938
<211> 482
<212> DNA
<213> Homo sapiens

<400> 938

ggccattga tgaccacaaa aaggaatgtc cagtgcagct gcgggtccac ttgagccctc 60
caagcaagca ctctcaagcc cgctctgtct gggagctctg tgtttcaga gcctgtgtt 120
gcagcgatgc ctggaatcct tgacacctgc acaccagctt cctgggcatt tccacaccct 180
ccccctccc acctcctgca tctccattt gcactgaaa tgcagctgct ctgggcccta 240
tagaggaaag ccaaatggac aggacatctc ctgtttgtt ctccctccc tgagtcaaac 300
cgaatctgaa gctcctctgt gcgagcctt tttgctctc tcattatgtt taaatgagcc 360
tcactgcag gaggattttt ttttaataaa ataaaataaa accaccacaa aaaaaaagg 420
ccagnnggc caattnagct tggacttaac caggcngaant ttttnaaaa agggggggggg 480
cc 482

<210> 939
<211> 525
<212> DNA
<213> Homo sapiens

<400> 939

caggaagccc tgaagatgcg gcaagctgtt ctctactttc ttgctgaatg agcaaatgct 60
ctaaagagaa gtaacagaag aaaaagatgg ttgtgccatt gaccaggtgc cgttctcgtt 120
gcccattcat ttctgccc cctgcacac atctgcccc taggaagcct gctcctgaaa 180
caagtctcta cccgcaagaa gggctcctatg aggtgccagc ctcacgatct tggacttccc 240
agtctccaga actgcaaccc ttcttagcta aggctatgga ttggaacacc tacaagtgtt 300
tttccacgt ggacctgggc ttctcaaac atggtgtctg tgttccaaag atcagaaggg 360
ggtgactgaa gtagaagcga agtcagcaac ttatctcag gcataactac ttttctgta 420
tcctgaaccc tcgagagggg atttcttgaa gaaaagaaaa gaaaaaatt ccccttntt 480
ccctgggang nggaanaggg tgggaaaaaa aaaagggtt taaaa 525

<210> 940
<211> 160
<212> DNA
<213> Homo sapiens

<400> 940

gacatcaaac ttctgggtcc tcattgcttt agcctcagac tgaatgacac caccagcttt 60
cctgttctt cagcttatgg acagcacctg cgtgggactc ctacgctcc agaattgtgt 120
aagaaaagtt ctcataataa acctctgctg gtatctctt 160

<210> 941
 <211> 122
 <212> DNA
 <213> Homo sapiens

<400> 941
 ggaaactgag accacatggt gaagaatctg ttggcgaaa gggctggaag attccggggc 60
 tgtgctgca atgagggata tacaacagtt ctccctatgc ctggaacaga gaacctctc 120
 tc 122

<210> 942
 <211> 304
 <212> DNA
 <213> Homo sapiens

<400> 942
 gatatgacat cttaggaaga agggactggg ggaaagaaag cactttctgc ttctgtggat 60
 ataaacacac agtgttttat tcctagtgc aacaaaaccc caagatcaac agacaagagc 120
 tgaaaaccct tcccaccag acacagtgcc atctaaatgt tctctcaaaa gatagcatct 180
 cataaacaat ttcaacaaaa ggatgtcagc tttacttta tgtgcatgca caaatcact 240
 ttccaggaaa aaaaatgacc attaccgaat ccatcataaa attaattaca ttagttgat 300
 cacg 304

<210> 943
 <211> 155
 <212> DNA
 <213> Homo sapiens

<400> 943
 atggcagaga tggcaagcac aaagaaatga gattcacgct attccattg catggatgaa 60
 aatacagaca ctttctaagt gaagtagaaa ttctctgaca attaacaaga agagtttctg 120
 tgtccgagat atctaataaa tgtatttgc tcaag 155

<210> 944
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 944
 gateccagt acattttact gcaacaaaac caaactgtat gaagttaagc cctgtctcca 60
 ggaggcatga aaccacctcc acttctcgtg atgctggctt cttctcaaaa caatctcaaa 120
 gacagctccc cggatatttt gaaaattcag cttctgttt tctgagaaaa atatattaat 180
 aacttctgaa ttctctgaca tgaataaat tgaacaagag tgtagcttt catctactgg 240
 gaaatattca aagctaagtc tactaaattg aataaaactt ttaat 285

<210> 945
 <211> 442

<212> DNA

<213> Homo sapiens

<400> 945

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ctccattgct gactggcttt aatggaaaga gtatttttgg tctgtttt gaggtttggg    60
acagtaacaa gaaaagaagc aatttttaca tttaaatggg atgagaagtt caacacaaat   120
atctgtagca acaaggaaac atctcgaaaa attcttatta aaatttatac ttaccgttga   180
aactacagac atatgacaac tcaaaaataa acccaatttg gacgtggaat gtttctttca   240
agggtcaagc atcctgttct ggttcatttt gatgaagcct atctacataa aattggaaga   300
ggcttgaaga tcttttgggt tcagtttctt catgtttaca gtagtaggag gctacagata   360
tctctaaaat acttctgttc taaaagactc tgcaatttta aatggggata tattttatcc   420
aaacatggta atgcctttgc ca                                         442
```

<210> 946

<211> 670

<212> DNA

<213> Homo sapiens

<400> 946

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tggggggggg aaggccttta ccccttggc ccattttaa agggttcaa gggaaaacct    60
tgggangggg taattaantt ttaaagttt cttttaacca ttgggaaaat tgggaccaag   120
gggaaaaagg gaaaaaancc aaaattggga aaaaattttg ggaaaagggg gaaaaagggg   180
gaaaaggaat gggaaaaccg gcctttaaag ggtgggtcca angggcccct cttggaagcc   240
cccaaagcc taaaaggccc cantccanta atccccctt ggtggaatcc ttggcaccct   300
taacaccatt cccaaggaat ggggcccttg gaaagttaaa gtggaaaaga atcccccaa   360
aaaagaaagt ggaaaaaaat aagncnttt aaacctggat ngggcatttc cncctattt   420
gggggaattt ggttttttg ccttcaccct taactggaat cnaatggtan ctttggaaa   480
atctcccga ccttaaaaaa aangttctt ttgttaatt ctccccacc cttganaaa   540
tgtacnttt gggaanatcc accctntgcc cggcaaaaca attgntntt taactccacc   600
gctntccca aaaccttata agaagcta atantcccc ccccccttg ntggacctec   660
tttttggga                                         670
```

<210> 947

<211> 315

<212> DNA

<213> Homo sapiens

<400> 947

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ctttaaact tctgaactta aaggaaacta ccaagaaaa ctaccaagaa aaagaagttg    60
aagatgttga agttgaagat gacctttctc tcacaaggt cttcataag aaataataag   120
tctaataaat ttaacgatgt gtgatcatat tctaaaatga aataacagtt tttagatttt   180
gaatgaaata ggtaaaatgg agcaaatcac ttagagttc tgcattctga agaacacaac   240
caatctctt acctgngng natcaaagat aatattctc aacngtatta aaccaattta   300
ttgccagget ctgtc                                         315
```

<210> 948

<211> 495

<212> DNA

<213> Homo sapiens

<400> 948

```
ctctcaacc gtctccctc tccccatta tggactgaag gttctgtcc ttccaaagt   60
cacaagatgg aaattttaac ccattgtga tgacattaga agataacgag atgatgatca  120
tactgtaaaa gccattcaa nganggtnaa aagnagcnac cctnnacncc ccaggaagan  180
cnnctggnac natcatcaac acagaagatg acttctgtgg ccaaattgtg gggagtttt   240
caccactcac caagcagcaa gacaccaage tgggtgtcct ccaattcact gtgacactgt   300
ctaccgggag atctgtcata tcgcacaggg tgaanactca attnccaaac tccccccac   360
cngagcaaat ccacactntg ggnatttng ccccncttt aaaatgggtt tttaanccc   420
atnnggggtt ggtaattgg tggggccnct tcnaattta aggaaaccct ttctggttt   480
tttaaagggg gggggg                               495
```

<210> 949

<211> 582

<212> DNA

<213> Homo sapiens

<400> 949

```
naactgagct anggcnaagg gancctgnta cantggtgga ttgctccgaa caggagcngc   60
ctgttcgggc cgagctccgg tccctccga gagcggnttg caaatttctc ctaatgtgg   120
agactggtgc accaggccaa gtggncccca cttnccctt tcaaggact ggtgnaaacc   180
aatgggaat tgccccga aaagtgggct cccggggggc cttgagaag ggatcaagct   240
gaggaagctg caaaagctn gtaacaagg aaggggcacc agggcccggtg gttgtgggcc   300
ggaaacaaaa gccaacctgc ttgtctc tggcaanaa attggaattg ccnngggntt   360
cnaaaaaaat ccgnaaaccc caccttgggg gggcctttt taaaaaaaaa ataaaaaac   420
ccaaaccggc nttgccent ntaaaaaac cccaacctt ttggcgnaaa aaaaaaggga   480
aatttgggg ttgtnaaaaa tttntttt tggnaaanct ttcnngggg naanaancc   540
ctttgaaaa aaaancaann ttttgggnc ttggcccaa aa                               582
```

<210> 950

<211> 500

<212> DNA

<213> Homo sapiens

<400> 950

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aacaaagcat caggtaagt acccaaggcc acaaggtgaa gaagttggag tcaccaggt   60
cattctgact gtaaagcctc accacatcac tagcaggaga agatggagaa gcatcatnat  120
ntgacnctg atgaancaa aaattggnct ttttnaaan ngcngncccc anaattctca  180
caagccatcc tgaccatctt gcaagagtgt caggagattt cactgggtt cttgtgatta  240
tattcagaga ttctgtgat gacattggtg gggacttcag ttggaatcac tgnattctt   300
atccacttc cctggatggn cctcagtn ctanccaag gtanaancca anaaggcang   360
ggttacagaa taaagtgtc ntgggaatgc anaaagatat nctactctgc ctgaaggana  420
anaaggcttc tcactnttaa ttggccttt tancccaaac agncccttgg gagnggggaa  480
naaaacctga gggggcatt                               500
```

<210> 951
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 951

```
aggcagcaac atccacttgg tgggtggtgaa ggatgattga gatacttga ctggaaagct   60
tctagccaag gctgacacat aaggaagatt ttaggatgac ttgttgaat ggatagagaa   120
ggaggaagag catggtatat ggggtctctg ttacctgaa tggatgaatt cagctgatgt   180
tgaaccaga tgccacctc tcttttcat gattagataa cacatagatt acccacctac   240
gggatggaag ctgttagaag ctggccttc ggagagcaag tggggaggca ggtgatggtg   300
ttcaacgcc ttgctctaag cctcttcat aaagtggcta catatccac ccaaattgcc   360
ttgaaactt ggcaagtca ctgacctga gaagttaagt gctgctgaa cccagctga   420
acacattgtc ctgggaan anaaaaacnntt ngcncctntn tcttccttg catagaaagg   480
gtaaatttgn ttacagctt ccc                                     503
```

<210> 952
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 952

```
agttaaaaat ctgcggttt taattgcacc tgaggatgcc cccctgctct gttcctagct   60
ggtgttcgac aggcggaacg gaaggattga agagctgacc acaatactc ccaagccact   120
gtgcttcta cagcatggcg ccaatacccg tcctttgag aagtggagtc ttgttcct   180
tccttgagt ttggcagga ctctgactat gtcagaggta aatttatgtg acttcgaga   240
ctgggtcatg aaagacaaca ccggttctgc ccagttcctt aaaatgaagg aaggctggca   300
ccatggtgtg aggaagccga aaccacacag aggctgccgt ggatgctcca ccaactgccc   360
actgaggcta accnccaac atgggcatga aaacatntt aaaanaantn ttggccccac   420
ccccccgaat ggnagaaaaa ggtttccaa aaaaaccac ccncccccc gggactgggg   480
g                                     481
```

<210> 953
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 953

```
atattggctc acttactgga tcaaggcagc tacattaca aaaagaaaat aatttgaca   60
gaatcaagaa gtctattata atgtaggtat ttgaaatcta cctccttgc gaacttgag   120
attgatctac agaagaaaaa tcttagcatc taaaggtctg tttcaggaa aataaaaatg   180
tctatcaatc taccataaac ctgtctgggt tatcaacaac catcaatgag aagaccagg   240
ggaaaattta gggacagaga gcactgtca gacttcatgt ggaaatggaa agctgagcag   300
tcgcttgggt tgaaagaaca gaatgttct cactgcactg tcattcagct tccaggaatg   360
ctgcatttca gtgggtatgc ctgtcatcca gccgctaatt cancttgaca aggcccgaa   420
ccaaatcatn ttgaaanccc aannttctt ttacgggngc cttntgaaac aaaatactt   480
ccaaaaaac anacggttgg gtctgga                                     507
```

<210> 954
 <211> 487
 <212> DNA
 <213> Homo sapiens

<400> 954

```

cttccaagca agctaagcaa tgtacgttct ggcaaacgga caccaacatc cacgctgcat    60
taatcatcgg tcccacaaaa taacccaaac aagacccaat gactgactga gagaaagcct    120
caagtctgag atgagacgct tgcctcttac agtctgttgt gccatactt tctctacaa    180
caaagcacac ccgtcactag aaggcaggat acactgtact tcttaagatg tgactcagag    240
aattaacaag gattcttct gcaagggtcaa agatgataaa tatgaatgct aatgtcctgc    300
actcatcagt tactcagtga aagagactac acgtagggtca taaagttcct acttgccata    360
agattaaaca atgggctact ggctttctta tttactgaac atcanaatga aagtcattgt    420
atgggcctgt ntganaaata nnntganagg gtgggttccc aaaaaanccc aaaaaaaaaa    480
agggggc

```

487

<210> 955
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 955

```

gtgtgcaaaa tctctccct gggagccaag tggccccctc agccagcaac agtgacaaga    60
agagatggat aaagtgtat caaatgtctg ctgaccttag tgagggggaga cagagccaca    120
taattgtcta cagaaggat tatccattcc ggtcattgta ctcaaatgct tagaaaattc    180
tgaacattct tcttggccga gggaaagtac tacgcatga acagaactat tttggtgta    240
aatccacctg attttaaate ctggctttac cataaacaca ttcgctctgt gactttgagt    300
aaattacttg gctttcct

```

318

<210> 956
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 956

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gtttttgtgt ggacataagt ttcaactca ttggataaa gaccaaggag agcgattgct    60
ggatcatatg cttctaccc accaatattg agaaggaagt aaaatggaaa agccaagaaa    120
gaatggtcga atcaggacac catatgtcca ttctggctt ctactcctt ttataaacac    180
aagagtggaa aggtttggct ttattcgaca cctcaaagag gagatgcagg aggatgagca    240
gtctgcagtg caggaggttg gagacaaaga gaaggtgatg tcacagaaac ctacgggcac    300
atggtccctt ctccaagggt agaaaacgga ggctcacaga agcataagaa catcatctag    360
acacgcacct ggtagtggc aaagccaagg ccagaacang ctaatangtg gnangacttg    420
ncntttctca aaaaaaaatt ttggcctttg gccttcnan atgatgctgg aaccaagtta    480
anactttggg aaaccattgg ggaaggcatg actgt

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515

<210> 957
 <211> 268

<212> DNA

<213> Homo sapiens

<400> 957

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cataactgac gatngagaag cantacttca tcactcttgg agaattacc nacggncct    60
gngnncccg tccccggnac actttctnat ggattttgtn acnntttnt aaagggggaa   120
aaagccnttt gacctgaagg gcttttaggn agaaaaaaca caaccccggc cctctgtgg   180
tgcagtcttt taacattcac gcngnaccgt gnacccttg gggaacattc atctctatt    240
ttaaaaaaaa tgctttaag gtatcctc                                     268
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<210> 958

<211> 426

<212> DNA

<213> Homo sapiens

<400> 958

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ctgccacct ctctatggga tgagagactt gagaaattca attaatcca attcagcaaa    60
cactgagtat ctgctatgtg ccagggtactg acaggtacca gaaataaaga gatcactgtc   120
ctcgaggtct ggtgagaaag acgagcattt ggaagtgtc taacatcagc ataatgacct   180
gaacaagggtg gcacggagct gagaaagaag cgggtacttt atttctcct tctgtacaga   240
gtatataaat atattatgaa cagtatacag aataaatgga ataaagtcaa tacctacttc   300
attgccatcc aggncaaaaa ctggagggtt ttctatact tnanaagttc cccatgcac    360
ccttcacaa ttccctcagt ctctaaaaa cgaactacaa tctgaccgt ttgtaataat   420
cgcaac                                     426
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<210> 959

<211> 491

<212> DNA

<213> Homo sapiens

<400> 959

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cananctnan ntgaacaaac caatgnncgc ttnaccaag nagaatggga annccnantt    60
tnaaatngg aaaactgggc ccttgggtt cttttcaaa angaggttta aagggcagaa   120
gagcccagaa ccactccaa tggacaggtt ttctaagtt tctctttta aacttaaga   180
gggagtctt tgcactgaga agaactggga atgggccccat cggtcgccga aacatctggg   240
aagaaatccc gtctcattaa agactttcag caaccattgg cctcagggtg ctgtgaaagt   300
gaatgctatg tgccttgtaa ggctaggtga caaaaatggn catgcanttt ncacctgtt   360
ttnttatgg gacgccnctc ttgggaatcc aacctncca taaagcttac tggnggangg   420
aaaccccata nggaagcccc atggcgggaa aggatcacca tgggggaggg taaccagct   480
taacccaagg g                                     491
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<210> 960

<211> 519

<212> DNA

<213> Homo sapiens

<400> 960

ggnngcctt ttctgntccn tancnaacan gaccccttt cccttggcc tactttaacc 60
 tcttggggan gangcaggaa acccccagcc aaggaaaagc tggccagggg agggaaagaa 120
 gaaagccaag ggaaaagggc acccccagaa gaaagaaagg ggcttggggg tccccaagct 180
 ccaaagtgt ctattatct tgtattgaa tatcccaaa ttgaaaaat tcaaaatctg 240
 aaacacttct gatcccaagc attcaagac tctaagagt taatacgaag taagaaagaa 300
 gaagtggag ttaaagcagc tcgtccaag ttctgattt gccatttcc tgtctgagt 360
 ganctggagg tatttntgc caggaatgt canggttgg ttaccataaa ataaaacatt 420
 gtgnccatgg gngggttgg ctgcaccta tcaaccccat tcactttaag gtanttaaag 480
 cccccagca ttgccattaa ctggttctt ttgggcct 519

<210> 961
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 961

cagatttnat ganaacttac tcactatcat gagaacatgt ntaagggaaa ctgctcccat 60
 gattcagta ccggcncatg gttctgccct tgacacgtgg ggatntcat gtgttcacc 120
 attcaagtg cgatttgggt gangacacan anccaaacca tatnactgc taatgaggaa 180
 actgagncag anaggtntag ngatgtaccc aagtctgcc ggncggngag tggcagagcc 240
 acgttntag aggaggacag cccagccccg cateccccgt gcttcccat gtattatgc 300
 cctgcctccc tgtttgctgn tccactggaa tggtnaaca tgcaagctt cctccagct 360
 gtngngccag nacatggctt ncttctnct cccgaagcng aatcgcgga agccataggt 420
 tcagaagatc ccagtttct ctgcttgg 448

<210> 962
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 962

cagcagtatc cactatggcc accatctcca tcttcacag aataaggaaa ataaaatc 60
 tacgatagac ttttctga agtcaccaa ttactaata actgaggtgt ttcatctgg 120
 ataattcatg cticattatt gggccactat tctctgtt gggttctcc ttgctcctg 180
 tgacaaacat ggggttcaga tccagactcc aggaggtagt gatgttcaa ctttggtaa 240
 catacaggag aaaggccata tgaggacca gcaagaagt ggctatacat gggaagagag 300
 aactcaccag aaaccaacca tgctggcacc ttgatcggg gccttcaga ctccagaaat 360
 aagaaatcta caggagtaag tcagctaaga attctgttac tgggtcgtag aattcagctc 420
 cctccctgtg ggataatgga ca 442

<210> 963
 <211> 516
 <212> DNA
 <213> Homo sapiens

<400> 963

gcgctgggac tcngnncta ctncatntgg gtgggttng ngggggaaaa aaaggaggng 60

gaaaacacnc cactggaaaa ctggttccca ttggggcctg tcntgcttaa aaaaaggccc 120
 agagaggcag tcttgacacc ctagatccca agatctccaa ggatttggtg gcataccac 180
 tccagcacac agaagcatga ggntcatgac tctctcttc ctgacagctc tggcaggagc 240
 cctggtctgt gcctatgac cagaggccgc ctctgcccca ggatcgggga acccttgcca 300
 tgaagcatca agcaagcttn aaaaggaaaa tgcaaggcga aanaccaag ggtngccaa 360
 gacaagggcc ccaaaggcca agggaaagcag nagantccaa cctttnttg gnaaaaaag 420
 ggccttatac ggagncaaaa aaagcttggtg gggggggact tcgggaaaaa actaaggaaa 480
 aagaatgcca gtngaagatc tagaaaagcg tgggtg 516

<210> 964
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 964

gcacagactt ttgccnngcc ntnnnanena acttaaggnt aanaaccan ggngggggcn 60
 ngtttnangg ccnntaaang ncccccttgc aggtgggaat ggccgcccg gncctactt 120
 actggtcttc gggtcgccaa gctttcttgg tgggtaaact tgagggaaaa ctggctggct 180
 ttaatgaatc taaccagaag ggaatgaata attggcttgc tgcccaagg gacaaccccc 240
 acccagtttc acaaagaaaa tcccgtaaaa gaagaagaag catctcttc aagggtgaaa 300
 aacantaac ccatgaagcc cccctttnct ttgggggtt taccggagaa tgaatggtt 360
 tgtnggaaaa ggcantgaca aggtcaaggg ggttaccgtg ccaaanaacn tctgggaacn 420
 tcgacttacc ttgaaattga atgccaagcc tcangccatt gggtaaggc ntggaatgcc 480
 ccttggggcc aagtattta agtantccca cattgactca agttgaaaa a 531

<210> 965
 <211> 208
 <212> DNA
 <213> Homo sapiens

<400> 965

gaaaaaaaaag aagcctggaa atggatcatc caggactgac ttcaatgat gtcaaatcc 60
 ttagcggttg attatcacc ttatgggcac aagatggtg ctgctcttt gaggcataaa 120
 gaaggaataa gcaacaaagg atcatgccta aaacatcact gcccaacagc gccacagccc 180
 cccaacaata aaccttcct taaatgcc 208

<210> 966
 <211> 440
 <212> DNA
 <213> Homo sapiens

<400> 966

gatctgagga tcatacccta atagcgacct aaagtgttca ccacttcat gccgaaaaa 60
 atcatctctc ctggaatag aagatggaga cgatgtcatt ctcatatcaa cagaggaaa 120
 tgaaggcgac aaggatctt ccataacatg tactaattca tgttctctc ttgctctaa 180
 agtatcactc tgttgagaat taaaaccag tggaggagggt ggttaatgt ctctctctg 240
 cttcacctcc actgtaatg caacaggatg gtgatccaac attacctgta gtgaactggt 300

accagcctgt gcctctcat cccaggttg cctatnacc cccaaaaagc attataatat 360
 gtaaatcaaa tgaagaaaaa gtgtatatt atagcataat ttaatttaa tgtcataaa 420
 tgataaagct ttaaaactag 440

<210> 967
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 967

ggctttccgc ccggggtgaa aacccaaatc aaggtggact gaaagaagaa naaaggttca 60
 agaatgaaca gggagtggcc gtncaaaggg taccagacgc ttggagggaa gccatgggaa 120
 taaaaaattt tgggcccccc attctgctgg tccagaaat aaagaactac attttccaa 180
 gcctcctttt gcagctggac cncgggcatg tgacccatt ttagggggca tggtaaaatg 240
 ggaggccctg tgtggcagct tttgggaaa cttctttt gaagggggcc ctgttanggg 300
 gnaacttngg aattntttt ttgnccac ttccccac ttcctcatt ttgaanggc 360
 ctaaggcctt ttaaatgaa agctttggg accncaaaa gtggaggga ctgcncccc 420
 canggnatg ggcataaggg gtaaagccca nactggtgga ccagtt 466

<210> 968
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 968

agagcagaga gcatgatcc ggttcaagac caccctcatg aacacactca tggacgtcct 60
 tcgccacagg ccaggatggg tggaagtga ggacgaaggg gagtgggatt tctactggtg 120
 tgacgtcagc tggctccggg agaacctga ccacacctac atggatgaac atgtgcggat 180
 cagtcacttc cggaacct atgagctgac ccggaagaac tacatggtga agaacctgaa 240
 gcggttccgg aagcagctgg agccgtgagg caggaaagct ggaggcagcc aagtgtgact 300
 tcttcccaa aaccttgag atgccttgc gaagtaccac ctgtttgta gaaggagttt 360
 cgcaaaaacc caggaatcac ctggatcatg aagcctgaca caagaagctc tgacgaccag 420
 aaagatgata tnccggtgg agaactatg 449

<210> 969
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 969

atcaciaatg ccccaactgg gtaactgtca gaacccaaca ccatcaacgc tctgcagaaa 60
 gtaagggggt gagtgaagat gaaaatggag caagaaagag aacttagcat gatgactgca 120
 caccctcagt gaatggcagg cctaagggga gaaatttagg cctgtccac ctacagtga 180
 aaaaactcaa tggttctga gactcatact cctctctc cactgtgtag gaggtccca 240
 ggacacatga cagtgaag attgaggcag tcagagggaa acttctgta gccccaacac 300
 aggcagagat ggtaggagct nccccccc aacaaggctg aaaggtcgca tggcncct 360
 gaagctcana atccacagat gatcaagtga aggatgacag aagcaatctg gattatgaa 420

agaattgctc tgaaatatga aagatgattt taaagcctg

459

<210> 970

<211> 441

<212> DNA

<213> Homo sapiens

<400> 970

gttcttactt gaaactgatt taacatatta aggaaaggga tcaattgaaa gaatgggtgg 60
tagctcacag atgactggga agtctgcttt ggatgcctgc tggaacaatg gaggttgaga 120
aacagctagg accccagctg aaatcatgcc tgtctgggtg agcattaaca tgcctccaga 180
agtcaaaact atataaagga tatactccga gaagtattcc tcccttctgt acccactcca 240
tcttgttctt cctagccagc tcttgaagag gcggaaattc actctaaaca ggagaagcag 300
caatgagaac ttaagaaga gatataagcc tcatccaana tcacctgcag aggaggacga 360
gggaaatttt atatgggaac aattatctga aaaatagaat gtcctcattt gtatgggcaa 420
ggctgggttg caaagaagtc c 441

<210> 971

<211> 442

<212> DNA

<213> Homo sapiens

<400> 971

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tggagatggg gccatttaga atgccagat tcaagaggca agtagaaagg agagttgacg 120
aagggtcccg agcagggaca gctggaaaag cagagctggt ggaacttga gagctgtggc 180
ttcctgtggt tgttgaaggt gacggtcadc ttgatcctgg ctgggcagtg ctggagcagc 240
ttccccacct ggggatcica ctggctatcc ttctctcaa cttggatgtt tagntggctt 300
tttatttctt tggttattgg tgctattggc ttgggtggg ggggtaattt cttatttgg 360
gacttttagc acataaagtt ggagataatg aatgggaaca gaatgggaaa gactggatat 420
aatgatacac cacataccct cc 442

<210> 972

<211> 440

<212> DNA

<213> Homo sapiens

<400> 972

agttttcgaa gaactccagg aagtggctgc agagcaaagt aggatcctga tactgagctc 60
aagtgattca gaatgaaaag accttggcac agacctgtta aggaagctcc atataagggc 120
caccgggggt ggctgagtca gaataccagc catgtggcat gtcgcatggg gcaagagctg 180
tgctgcccat gggagtccag agaaggagca cactaaggac caacaccagc attgtctta 240
ggggaagcct gcagctatgt catgaggacc ctcaacagcc ctgtgcagag gactatgtgg 300
catgaaagat gccttttgc cacaaccag cccacttgc caagcatgtg aacaagctaa 360
actgaaagca gatcttcagc cccaatcaag ccttcagatg acagtaacct cagccaatat 420
actgactata acctcataaa 440

<210> 973
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 973
 actcttttgt gttaggtttc ctgacaatga aagagatact agaataatg aagaactacc 60
 atgatctcca cagcatcccc tctctgtgga tgggggacaa cgagatgggt gctttcccag 120
 agctcctgtg gaggactgtg aagatgggtga ctgcccctca atgtatcatc ttacaaaca 180
 tttccttggg gtctgcagag ctgaagacac tcattgggtc tctttctgg gaatgcact 240
 ggagataatc cccatcaagc gcattttcat cgcaactgag tctagtgcag gcatcaaatt 300
 ctgagcaacg ggactattaa ggcagccacc attttnttc aggttcagng caatcaccaa 360
 tatggtcact gaccaagtcc atcatcttga gtccctcaa cagctgcaag ttctgttct 420
 tgccctc 426

<210> 974
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 974
 ctttcatagg tcactacaat ccagtgccaa cacagcattg ggtggatccc atgagatttc 60
 aaattccaca aagaaaaaat ctacttgggtc ctcaacatta ctccaagat tgctggagt 120
 cactgtacca ataaaaactc atggacaaga aaacagaaac tagaagtga ggacttcaat 180
 atccaagaag atgggtgtagc ctcaagatag aaaaagccca cacttctgaa acatcattg 240
 aaaggctgct gaagacctgc atcacatgag gttatcaaac tacagccac agaccaaattc 300
 cagcccacca tctnttttga agggcagggt gcncatcat gaggatatca agacatccta 360
 tggtagggcc tgtgtgacag gaaactgagg cctcctgccaa aaagccctgc gaatgagcca 420
 tcgagg 426

<210> 975
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 975
 gtgcccagac actgcttcag gagcctgagg aacgcagtgg cttttctatc atgacctgac 60
 ctgggcttct cagcatgaag acagagctgc attcctggga ttctaagaa gaaaagaaga 120
 ttctgtcaag cctgtgttca atcaaaatat cctcccctac atgactgccc cccactccct 180
 gccgcaccac ctttctttt ctgtttttt attgctgtta atgtttaaca tgaaaataag 240
 aatgatgtaa cccaggatcc agaagccaat acaaactcaa agcaattga gttttaact 300
 ttgccctatt tcattggggg ggaaaccaag gtcattaagc atgacttgg caagcacatc 360
 aagtgtgtca acacatctta aattacagct gtcaattagt tacctgaaga cttaatatgc 420
 caagctc 427

<210> 976
 <211> 439

<212> DNA

<213> Homo sapiens

<400> 976

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gtgggggtctt tcactgggat ggcctgtcaa ggagcaaacg agatcagatc agagagaaca   60
ggagaaagag ctctgtgcat gtggcttgct gtacatgatt tacaaaatga aactcttcac   120
actgaacctg ggttcacctt tggagcaata tatgaaagaa aacagaaaac agccacagga   180
gcctggaggg acagaggagc tggtcgcttt gtggaccact gtacacctga gaaaggtgac   240
tcttgaaagg aaaagaggtt gcttgacgta cctttgaag ttcacgggca ctgcaaagaa   300
tgcatttttg tagcttgatc cacctnaaa tgccanatt catccacatc tgcagcttat   360
gtcaggggc tggcagctaa cagaaacat cagatctgcc ttgttttct tatcaaatca   420
tatgtataa tgcacaac                                     439
```

<210> 977

<211> 443

<212> DNA

<213> Homo sapiens

<400> 977

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aaaagttgc tgacgcctga tatggagcac tagaaagaaa ttattttcc aagcatcaac   60
ccggaagtcc cagcataccg aggggtggcag acatcatttc tcaatgaac ttagtattta   120
gaaagatata ttcactccaa gcatcaagtc tttctgtcc tgcaaaagtc ttaagtcaaa   180
ccagaatcca ctagtagagg gcaccttgg attcaacagt aaaaggagaa tctacaaaac   240
cagctcatca aaaggatatt gaatgaagct atgatactg tagcagttac tgccattttg   300
gaccataaaa ctgacaatcc ttaacaatt accaggaggg cagagcggaa agaacattga   360
tgtcatcact gagttgctgg attaccttac ttagaaaata gccaaactcg catgnttggg   420
tatttttta aaaagtcttc ccc                                     443
```

<210> 978

<211> 433

<212> DNA

<213> Homo sapiens

<400> 978

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acacagagtc tcactctgtt gccaggctg gggtacagtg ctgcaacgtt gtccaagatg   60
tctggaactc ctggcctcaa gcagtcctgc agtcttagcc tcccaaatct cttggattat   120
aggaggggag caccatgccc agccctgcag ttcttttaa tacatgatg gtgcttcat   180
ttggcactga attgttctgc cattatggtt tgcataagg agaagaaaaa tctccttgaa   240
cacacgggta aattgataaa ttgaaaaga tcatatggag ttgcaagcac tctattgata   300
actacttatt tgnnttttaa caactatctt ccatgactnt cctaccttct tttccaagt   360
caatttctta aatgaccagg acatcataca ccataatccc catatacaca aataacaaat   420
aaacgttctt tta                                     433
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<210> 979

<211> 386

<212> DNA

<213> Homo sapiens

<400> 979

gaactatgcc caggcagaaa aaaagtact gtaggtgatg aagccagtgc tccctgaacc 60
aaataaaccc tatcgacgtt accgaactgc cgggcaaac cagagcaact cacttacttg 120
gaaggtgaaa aacacttcaa catactccag gcggaaccg acacttaggg gccaggcaga 180
tgaaacacca ttgtttaa aagtctatta tticactgtc tcttcaaca agggggaaaa 240
ctgagtgtt aaacactgag ataatgcccc cttactaaa cctatgattc actaataagc 300
agggtcaatg gccattcata aactttaaag aaaggaatta ccgaagcccc ttgcttnaca 360
aaattcccc aagaaacaga aagagc 386

<210> 980

<211> 260

<212> DNA

<213> Homo sapiens

<400> 980

actgaaaggc agagcaatga gaagcagaac tgcagagaca aggattccag gtgcttgaa 60
gtgagggtgg agccagcccg ggaaaagatt cagccccaga cggctgcacc aggtggagca 120
aagatgtctt ctttttata catgtcaact agaaggtgac aagagacagg agcccatgat 180
cttaaagctc cctgtgttac ccagcacccc tgtaagattt cctaatactt cttttataat 240
taaaaaaaag atatttcat 260

<210> 981

<211> 426

<212> DNA

<213> Homo sapiens

<400> 981

ctttatacaa ttattccaa atcttctaaa ctgacagtga gggagagtaa ttgaaagga 60
ctgctcaact caacgtcatt tgaagattg caccacagct gcattttcc aatttcctgg 120
catctattct gctctcctgg acttttcaa aacaattgta agtggatgaa taaatataat 180
aactgattcc attgatactc ttagaccatc cttggactt tctgctttg gacattttac 240
agtttaaaat ttattatca tctatcgatg ttcccaaag aaggactcaa agtacacatt 300
gtcaaagatc tcatggatct aantaagggc cggggaacca ggtncagaat catacattgn 360
ctctacacag aggggataat ttctgaagga aagaagaaag taaattcctt aatcaccctt 420
ctggcc 426

<210> 982

<211> 440

<212> DNA

<213> Homo sapiens

<400> 982

gtctcaaca agttttccct tctaccgta cagcctgtat ttctggtgac actgtgtccc 60
cagaacccta ccttgctcc tgagaagctt gactggtgag gagcagggt gacttctgt 120
taggcccagg aacatccaga ccagcactg cctactctg gattattggg gcagacatgg 180
ctgctggatg ccatgtgcat gtgcagaaca tcagcaaatg gacacagtga tcctgaattg 240
tatgcccgtg tcgagcggat cacctctagc cagcacagca cttaactga caagcccaga 300

taccacccac agtcaccaac atgcagaaaa ctttgcttta acatgggaga gacgggtctc 360
catgttttgn ctttaagccc ctttcttgaa catcaccacc tggagcctac attctgngct 420
gnattggctc cctgtaaggt 440

<210> 983
<211> 439
<212> DNA
<213> Homo sapiens

<400> 983
tgctgtgaca gtgtcttaag tagggcatgt ttagatagtg aaaaggacgg caaactcgag 60
gtgtgtattc aggaagaagc agattccaag atggaagaga aaatatcgag agaaatatgc 120
cgagagaaga atccaggcag aatggaatcc aggcagaatg gtgaatggaa ggttcgggtg 180
accaagagaa aggaaggggtg actcagcaag tctgtagttt cagctctgt atagtaccgt 240
tatacttgaa aagctgaagc ctttctcgg ggaagagtca gaacggcctg gagggcttgc 300
taaagcgctg ctggttggc cccncccg tgaatgacta atggagactn tgagggccgg 360
ctggtattt gagtttctaa caagccctgt ttcgatgctg gtacagccga tctanggaaa 420
atattggaac aaggaaaaa 439

<210> 984
<211> 439
<212> DNA
<213> Homo sapiens

<400> 984
tcggngcca ctttatcta ctggaggtcc cctgccaca tggcctcacc caaagcagtt 60
tgcttctca aagtcagcag catcaattg tctacaattt ggagatatca gacgaacaga 120
gggaaaatgc agtcagtgtg ctaaagctgc ccctaggaa atctaaggct atatctggtt 180
ccataaagtc ttgatcant cagtcanaac aactgcagca ttctgccgc tcagaatacc 240
ttaatggcct tagtagctga ggtcctcaca gactggcaa gagcaaatg gcattggaat 300
gggaggactg aacaagacgg aagaaacca agactctntg gtcattgcag aaggaagaat 360
gagagcccaa gcctgaggaa gataaatga gatgatttg cttaatatga attaaggcag 420
ctgncagtgg ttctgtaaa 439

<210> 985
<211> 444
<212> DNA
<213> Homo sapiens

<400> 985
ggcactggt tttgtgtaga tacaactcag ggaattatct ccactgcga tctgccatga 60
tcactgtga gcactctc ctgaacccg ncttcagtc acctttacc aggccgaccc 120
tactttctc catctgctaa gaagtgcagc tctaccactg gaagcatcca ctteggctc 180
actccatcc ctagtctaa aggactctt aagagagaat gtcagcacag tttgacaga 240
aacactctaa aactcctgga tattccagaa aaattaact tgggcaaaag aacattggca 300
tcaaagnaaa gctcaattta tacaccatta gccantttt gatagctata aacctgacac 360
gcaaatagga atatttatg gcataacact accgtttaca ttaaagtgt ttttaataga 420

atatgtaatt tagaaatata aaag

444

<210> 986

<211> 442

<212> DNA

<213> Homo sapiens

<400> 986

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gatgatcata aggacacaag ataaggaaat ccaatcagtt gctacgtgct gatgattctg    120
attctggccc tgcagtatcg cttgcatgca cctcctcctc cctgtgctca ctgctggaga    180
aaagagaacc ttggctgatg atttatggat ctacaagtaa tcgaagctta actgccacaa    240
aaataacttt atccagtcct cccccctcc cctgcacctt ctctagttag cgctgtaaga    300
acttgggtgc tcagggtggaa ggcatataaa attgnattgn attgaataa gctcccagg    360
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cctccattgc agcactaaca tt                                         442
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<210> 987

<211> 219

<212> DNA

<213> Homo sapiens

<400> 987

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gnacattgat acatcccatg aatgaagaat atggagaatg aatgtgatca cttacagaat    60
attatccagt gacatatatg ttaaaaaact atgacatttg aacccttatt aatcataaaa    120
ctgttcattc ttgaaaagg agaatgattc ttgttaaatt caaactccat ctgtattatc    180
aataagagta tctcagattg agtttcacac atcgaaact                          219
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<210> 988

<211> 178

<212> DNA

<213> Homo sapiens

<400> 988

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gaattctcca gggacttata agagttgctg gaagaaaaca gctgaggatt gagcacagtg    60
aactaatttc ctcacatctt tgaataagca gaagttggtg aaaaggaatg taaatattct    120
tatggtaaaa tgagttcaaa aagaatcctt aaatccttaa aattaataaa ccaataaa    178
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<210> 989

<211> 536

<212> DNA

<213> Homo sapiens

<400> 989

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agcatctgcc agagtctacc ttctcactt ctaccctcca ttcccaaaga gcaagaaggt    120
ggatatgtgc cagaaaaagg ctatagatcc ttacctcag tctttaatt ttaatcatt    180
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ggaaagagaa ggaatgagtt acaggagaaa gaataatgga ttgctgtca gaaaccaaga 240
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 ggtgcaaaat tcgtcaaatg cctttataaa ccacatgggtg ccctgtgaat gtaaacagta 420
 tgatgtggat tcctctaaca ctgatggcga agtggcactg aaagggcttc ttaagcttca 480
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<210> 990
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 990
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 ctccaaagtt gaaaattaac aatagaggtc agcctaaaaa agcaatgttt ttccactac 120
 tatctattat aaactgtgct ggatataatc acctttgggg aatgaaaatg ttccccaca 180
 ctatgtaatt aaagacgaag gggaagagga ggaaaggaga aggggagaaa gtatatacca 240
 aaagaccaat aaaatgcttt caaggagatt 270

<210> 991
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 991
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 ggaaggagag aggagcatgc gnetgactgc acgcgggtta cactgcgg cgccccaga 120
 aacagtcttc ctgcagcagg tgcctcagaa atgagcttct ctctccaggc tcatgctctg 180
 acacttgact ttctcagctg taagatggga ataacagtgg cgccttccat gtagatatat 240
 gttaggggtg atgagatggc gtctggcata aaatcaatgc tcaagg 286

<210> 992
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 992
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 ccagagcnet ataaaatagg cnagaaacan ggnccttgaga aacatgctgc tgtcctcaaa 120
 aacaaccttg caaacac 137

<210> 993
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 993

tttnaggatc tgaagctgag ggaattctac tgtgaggga acccactgtt cctgcagcag 60
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 gtaatgaatc agctagcaga aaataaccct ttctaattgg atgacataga acggtacca 180
 caagtcagga gcatgatctc tcagggaaaa acatgtgcaa tatgtggaca gtactttata 240
 accgtatggc tggaatgtgt tcgatttgtt cctccaccaa aggactggaa gataagcaag 300
 aatctgaagc tgggcctct ccaagtatta attgttctt acaaatgttt tactcaacgt 360
 gaccctaacc tcttggaaat tgctcangtg tagaacaggt gaggtgtctca ttcatagcct 420
 cactccactt 430

<210> 994
 <211> 67
 <212> DNA
 <213> Homo sapiens

<400> 994
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 agtttgc 67

<210> 995
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 995
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 atctggaagg ccaagctgct ctctgcatcc tcttactact ggtaaccact tcaagtcctt 120
 tatgtataga atgctccagg ggggtgggtc tggcactcat ctctttattc cacaatctcc 180
 actggacaca ggtcatgttt tagaaacatt tctctttaa tcagtccttt acttgattgg 240
 agacagacag gaaggaagta cacacctgca cttcaataa aaggaagaaa ataaaagtgc 300
 ttaacattc 309

<210> 996
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 996
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 gggaaaggct actgggaagg cagttagtgt ctgctgcagt gcacacaaaa atgggaagca 240
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 gacaggattg tatcaatagg tattggtcc taataaacat ctgacacctc aaattccatc 360
 ccagaatctg ctccagaga acccatcta taccaagacc ctgatgatcc cagtcacctc 420
 aagtattcc tgctgaagtt ccactct 447

<210> 997

<211> 373
<212> DNA
<213> Homo sapiens

<400> 997
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gcacgtgacc agcatttctca ttcccactc acattcggat ctcggtcttc aggctacatt 120
ctggtcagga tgaattacat gtataattca aaatcaagaa agctgttcaa gtacaacgtg 180
tgaggcttct gccaacgtcg aaattcatta ggaaccatga ttttggctga gcacatggct 240
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tcagagacaa gatctctttc ccttttcatt ttctccaat ttatctccct tggcataata 360
aatatctcaa gcc 373

<210> 998
<211> 432
<212> DNA
<213> Homo sapiens

<400> 998
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ttacttttc ctcaaaaagc taagtgtagt gtagcacccc ctgcccatag tctaagttac 180
agaagaatac taactgctg tttttcttc tgtgtgtga gccttatctg ttctcaccag 240
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tacaagggtg atatgccgta tgttacagaa acatagtttc ccaaggatgt ggaacatgta 360
gtatagataa atgtaaaaga ctgatcaact gcctttgttc tcgcttgtgt aagtagactt 420
catgaatcac ag 432

<210> 999
<211> 300
<212> DNA
<213> Homo sapiens

<400> 999
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actgagaaag gagctgggtc ccagtcagct caagccacgt gacctgttc ctccacttc 180
accttctacc atgagtaaaa gctccctcca gcctccccag agaagccaag cagatgctgg 240
caccatgctt ctggtacaac ctgtagaatg tgagccaatt aaaactcttc ttataaatt 300

<210> 1000
<211> 307
<212> DNA
<213> Homo sapiens

<400> 1000
aggctgtaca tgctgcctcc ttggtcctat gaaggtgccca cgaacacaac aagctacacc 60

agggaagaac tggagtgtat gttccttatg atacacttga aagcccaact gcagggaacc 120
 tgaacacatg gatctgcatg ctagtgaac actgcacgct ttatattgca cattttagt 180
 ggaaaatact atgactgtac ctggcaatat ttccataaat attatcctgg aattccattc 240
 atattcttag aaaataattt agcaggagca aaaaaaatg aataaataaa tagccatgtt 300
 caaaaac 307

<210> 1001
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1001
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 ttacaatgca aattgaattc ccaaccttgc agaccatctg ccgttaaaag tgagggcata 120
 gattgggaag gaattctgcc ttggactcc gatgccaaca tcagctcttc cttggttctc 180
 cagtctgtgg cctgatctgc agatttcaga ctggccatcc ccacaatcgt gtgagttgat 240
 tccttaaata taattcttta aaataaatct tcccccttc tctac 285

<210> 1002
 <211> 73
 <212> DNA
 <213> Homo sapiens

<400> 1002
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 gggattctgt ttc 73

<210> 1003
 <211> 277
 <212> DNA
 <213> Homo sapiens

<400> 1003
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 tggacccttg ccgcccccca cctctccac acacaccag tccagggggtc ccctttatca 120
 ccctttgctt gcaactcaa aagaagttgc ccacctctg agtcacaaca caaggctgaa 180
 taattctct agatgaaaga tcagtttcat ttcaaaacga gaatagggtc cttttttat 240
 ttctccaca tggtaaaaa taaacagaat ttgcttt 277

<210> 1004
 <211> 445
 <212> DNA
 <213> Homo sapiens

<400> 1004
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 gcatagaac tctctgatg ttgctcccag accgtgacct gtgctggcaa agcttctatt 120